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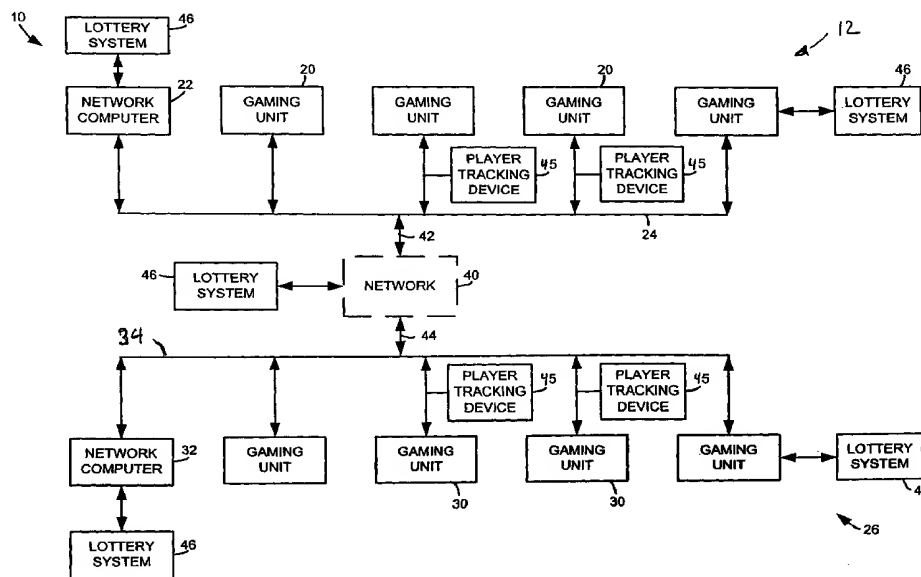
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(54) Title: GAMING MACHINE INCLUDING A LOTTERY TICKET DISPENSER



(57) Abstract: A gaming machine may include a printer or a lottery ticket dispenser adapted to provide lottery tickets to a player. At various times during operation of the gaming machine, the gaming machine via screen prompts may ask the player if he or she wishes to purchase lottery tickets, which, if desired, the machine will then dispense to the player. The lottery tickets may be tickets for an intracasino lottery, an intercasino lottery, a state lottery or a multistate lottery. The payment for the lottery tickets may be deducted from the value that the player has within the gaming machine.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

GAMING MACHINE INCLUDING A LOTTERY TICKET DISPENSER

Related Application Data

The present application is a continuation-in-part of co-pending U.S. patent
5 application Serial No. 10/097,507, which was filed on March 12, 2002.

Background

Electronic gaming machines of various types such as, for example, slot
machines, video poker machines, video keno machines, video blackjack machines
and that like, are known. Typically, casinos or other entertainment facilities include
10 numerous electronic gaming machines of various types to accommodate the varying
preferences of guests. For example, a casino may include a variety of electronic
gaming machines that may be, but are not necessarily, linked to one another via a
network.

In one form, lotteries, which may be operated by states or other public or
15 private organizations, are arranged into various segments called drawings. For
example, a state lottery may have a weekly or daily drawing and, therefore, there is
a possibility of a new lottery winner each week or each day, respectively. Before a
lottery drawing, lottery tickets bearing numbers, letters or other indicia are sold to
those who wish to play that lottery drawing. After all the tickets for a drawing are
20 sold, balls, tags or other items having numbers, letters or other indicia printed
thereon are randomly drawn from a hopper or from multiple hoppers. As items are
drawn from the hopper or hoppers, the indicia on each items is noted and a holder
of a ticket having indicia that match each of the indicia on the items drawn from the
hopper or hoppers is a winner. For example, a ticket having 11-24-35-46-52
25 printed thereon would be a winning ticket if five items each bearing one of the
indicia 11, 24, 35, 46 and 52 were pulled from a hopper or from multiple hoppers.

For lower payoff drawings, tickets typically have a fewer indicia thereon and
fewer items are drawn from the hopper. Additionally, for lower payoff drawings,
the number of possible indicia may be rather small (e.g., 1 to 10). For example, a

daily lottery drawing, which may pay out money on the order of thousands or tens of thousands of dollars, may have only four indicia (ranging, for example, from 1 to 10) printed on each ticket and items bearing the indicia may be drawn from the same hopper.

5 Conversely, high payoff drawings may have many indicia on a ticket, each of the ticket indicia must match indicia on items drawn from a hopper or from multiple hoppers. High payoff drawings may have a large number of possible indicia (e.g., 1 to 50 or 1 to 100). For example, a lottery like Powerball®, which is a multistate lottery, may have six or more indicia (ranging, for example, from 1 to
10 49) on a ticket and may have a payout on the order of millions of dollars. Additionally, tickets for large lotteries, like the Powerball® lottery, may also include an additional marking or index (e.g. a Powerball® number) that must match a marking or index on an item drawn from a dedicated hopper.

 Along with the lotteries that determine a winner based on the outcome of
15 drawings, many states or other public or private organizations also provide what is commonly referred to as “scratch-offs” or instant lottery tickets. A scratch-off type lottery, is conducted by pre-printing tickets, that contain the necessary information to determine whether that ticket is a winner. The information may be covered by an opaque material that may be scratched off the ticket to reveal the information. The
20 winning information is usually displayed in numerical form, or using other indicia, which allow a player to deduce whether he has won. A player can usually deduce whether he has won by evaluating the combination of several indicia. For example, a scratch-off game such as Change To Go® of the Illinois lottery, requires the player to combine six different money values. If the combined values add up to over
25 \$1.00, the player wins the prize printed on the ticket. When purchasing the ticket the winning and prize information is obscured by the opaque material until that material is removed. The types of games played using the scratch-off technology is limitless and many different types of indicia may be used.

Summary of the Invention

In one aspect, the invention is directed to a gaming apparatus, including a display unit that is capable of generating video images, a value input device, and a controller operatively coupled to said display unit and said value input device. The controller further including a processor and a memory operatively coupled to the processor, wherein the controller is programmed to allow a person to make a wager and to cause a video image to be generated on the display unit, where the video image representing a game. The controller is programmed to determine, after the video image has been displayed, a value payout associated with an outcome of the game represented by said video image. The gaming apparatus further including, a lottery ticket dispenser being programmed to dispense lottery tickets bearing generated lottery indicia in response to a signal received from the controller. Additional aspects of the invention are defined by the claims.

Brief Description of the Drawings

Fig. 1 is a block diagram of an embodiment of a gaming system;

Fig. 2 is a perspective view of an embodiment of one of the gaming units shown schematically in Fig. 1;

Fig. 2A illustrates an embodiment of a control panel for a gaming unit;

Fig. 3 is a block diagram of the electronic components of the gaming unit of Fig. 2;

Fig. 4 is a flowchart of an embodiment of a main routine that may be performed during operation of one or more of the gaming units;

Fig. 5 is a flowchart of an alternative embodiment of a main routine that may be performed during operation of one or more of the gaming units;

Fig. 6 is an illustration of an embodiment of a visual display that may be displayed during performance of the video poker routine of Fig. 8;

Fig. 7 is an illustration of an embodiment of a visual display that may be displayed during performance of the video blackjack routine of Fig. 9;

Fig. 8 is a flowchart of an embodiment of a video poker routine that may be performed by one or more of the gaming units;

Fig. 9 is a flowchart of an embodiment of a video blackjack routine that may be performed by one or more of the gaming units;

5 Fig. 10 is an illustration of an embodiment of a visual display that may be displayed during performance of the slots routine of Fig. 12;

Fig. 11 is an illustration of an embodiment of a visual display that may be displayed during performance of the video keno routine of Fig. 13;

10 Fig. 12 is a flowchart of an embodiment of a slots routine that may be performed by one or more of the gaming units;

Fig. 13 is a flowchart of an embodiment of a video keno routine that may be performed by one or more of the gaming units;

Fig. 14 is an illustration of an embodiment of a visual display that may be displayed during performance of the video bingo routine of Fig. 15;

15 Fig. 15 is a flowchart of an embodiment of a video bingo routine that may be performed by one or more of the gaming units;

Fig. 16 is an exemplary flow chart of a lottery ticket routine that may be performed by one or more of the gaming units;

20 Fig. 17 is an exemplary flow chart of a lottery ticket routine that may be performed by one or more of the gaming units; and

Fig. 18 is an exemplary flow chart of a lottery ticket redemption routine that may be performed by one or more of the gaming units.

Detailed Description of Various Embodiments

25 Although the following text sets forth a detailed description of numerous different embodiments of the invention, it should be understood that the legal scope of the invention is defined by the words of the claims set forth at the end of this patent. The detailed description is to be construed as exemplary only and does not describe every possible embodiment of the invention because describing every

possible embodiment would be impractical, if not impossible. Numerous alternative embodiments could be implemented, using either current technology or technology developed after the filing date of this patent, which would still fall within the scope of the claims defining the invention.

5 It should also be understood that, unless a term is expressly defined in this patent using the sentence "As used herein, the term '_____' is hereby defined to mean..." or a similar sentence, there is no intent to limit the meaning of that term, either expressly or by implication, beyond its plain or ordinary meaning, and such term should not be interpreted to be limited in scope based on any statement made in
10 any section of this patent (other than the language of the claims). To the extent that any term recited in the claims at the end of this patent is referred to in this patent in a manner consistent with a single meaning, that is done for sake of clarity only so as to not confuse the reader, and it is not intended that such claim term be limited, by implication or otherwise, to that single meaning. Finally, unless a claim element is
15 defined by reciting the word "means" and a function without the recital of any structure, it is not intended that the scope of any claim element be interpreted based on the application of 35 U.S.C. § 112, sixth paragraph.

Referring to Fig. 1, a casino gaming system 10 may include a first group or network 12 of casino gaming units 20 operatively coupled to a network computer 22
20 via a network data link or bus 24. The casino gaming system 10 may include a second group or network 26 of casino gaming units 30 operatively coupled to a network computer 32 via a network data link or bus 34. The first and second gaming networks 12, 26 may be operatively coupled to each other via a network 40, which may comprise, for example, the Internet, a wide area network (WAN), or a
25 local area network (LAN), via a first and second network links 42, and 44.

The first network 12 of gaming units 20 may be provided in a first casino, and the second network 26 of gaming units 30 may be provided in a second casino located in a separate geographic location from the first casino. For example, the two casinos may be located in different areas of the same city, or they may be
30 located in different states. The network 40 may include a plurality of network computers or server computers (not shown), each of which may be operatively

interconnected. Where the network 40 comprises the Internet, data communication may take place over the communication links 42, 44 via an Internet communication protocol. In other examples, the network 40 may be, but is not limited to, a private and/or proprietary network, a traditional lottery network, a casino network or an accounting network. Similarly, other types of protocols may be used to communicate over the communication links 42, 44, including, but not limited to, proprietary serial based networking protocols.

The network computer 22 may be a server computer and may be used to accumulate and analyze data relating to the operation of the gaming units 20. For example, the network computer 22 may continuously receive data from each of the gaming units 20 indicative of the dollar amount and number of wagers being made on each of the gaming units 20, data indicative of how much each of the gaming units 20 is paying out in winnings, data regarding the identity and gaming habits of players playing each of the gaming units 20, etc. The network computer 32 may be a server computer and may be used to perform the same or different functions in relation to the gaming units 30 as the network computer 22 described above.

A player tracking unit 45, which may be located in or near the gaming unit 20, may be utilized for communication of lottery information between a lottery system 46 and the gaming unit 20. The lottery system 46 may comprise several components (not shown), including a controller that may comprise a program memory, a microcontroller or microprocessor (MP), a random access memory (RAM) and an input/output (I/O) circuit, all of which may be interconnected via an address/data bus. It should be appreciated by those having ordinary skill in the art that the controller may include additional microprocessors. Similarly, the memory of the controller may include multiple RAMs and multiple program memories. It should also be appreciated that the I/O circuit may include a number of different types of I/O circuits. The RAM(s) and program memories may be implemented as semiconductor memories, magnetically readable memories, and/or optically readable memories, for example.

Along with the lottery system 46, a host system or network computer 22, may communicate with the various gaming units 20. Because the gaming units 20

may be produced by different manufactures, the gaming units 20 and host system 22 may not be compatible, and may therefore have difficulty communicating information. The player tracking unit 45, in an effort to resolve the communication difficulty, may be implemented into the network 12, 26 and 40, thereby providing, among other capabilities, the ability to communicate between the gaming units 20 and 30 and the network computers 22 and 32. The player tracking unit 45 may be implemented as a physical device on or at the gaming unit 20, or may be implemented as a physical device within the gaming unit 20.

In another example, the network computer 22 may be able to communicate directly with the gaming unit 20, and the gaming unit 20 may have an associated virtual player tracking system 47, as shown in Fig. 3. An exemplary virtual player tracking system 47, such as the one developed by the assignee of this patent, is disclosed in U.S. Patent Application 09/642,192 entitled "Gaming Machine with Virtual Player Tracking and Related Services," which was filed on August 18, 2000, and which is hereby incorporated by reference in its entirety. The virtual player tracking system 47 may be capable of a diverse range of functions. The virtual player tracking system 47 for example, may be capable of printing tickets that have been authorized by the host system 22 and which may contain individual authorization numbers. Through the use of virtual player tracking systems 47, the gaming unit 20 may exchange with the host system all necessary information including, for example, authorization, verification and indicia information, to enable safe and effective distribution of lottery tickets from gaming units 20. As shown in Fig. 3, the virtual player tracking system 47 may reside in the gaming unit 20, additionally or alternatively, however, the virtual player tracking system 47 may reside on one or more of the network computers 22, 32. In yet another embodiment, the lottery system 46, may communicate directly with the gaming unit 20, such that the gaming unit 20 effectively becomes a lottery terminal able to dispense lottery tickets.

Although each network 12, 26 as shown in Fig. 1 includes one network computer 22, 32, four gaming units 20, 30 and four player tracking units 45 it should be understood that different numbers of computers, gaming units and tracking devices may be utilized. For example, the network 12 may include a

plurality of network computers 22 and tens or hundreds of gaming units 20, all of which may be interconnected via the data link 24. The data link 24 may provided as a dedicated hardwired link or a wireless link. Although the data link 24 is shown as a single data link 24, the data link 24 may comprise multiple data links.

5 Also shown in Fig. 1 are lottery system blocks 46, which represent the various places at which each network 12, 26 may be connected to the lottery system 46. For example, the lottery system 46 may be coupled to any of the various network computers 22, 32, to the network 40 or to the gaming unit 20. The lottery system 46 may, for example, include, but is not limited to, a state or multistate
10 lottery system. Such lottery systems may coordinate lottery drawings, provide communications regarding winning numbers, attend to the distribution of prizes and perform any other relevant functions.

The lottery system 46 may also include intercasino and intracasino lottery systems. For example, an intracasino lottery system may be responsible for lottery
15 drawings in the casino in which the lottery system 46 resides. As will be readily appreciated, a casino may run a lottery having drawings that take place at regular intervals such as, for example, every hour, twice a day, once a day or at any other suitable interval. Additionally, multiple casinos may cooperate to run an intercasino lottery system in which multiple casinos sell lottery tickets and hold a single
20 drawing or multiple drawings to determine the numbers that define a winning ticket.

Fig. 2 is a perspective view of one possible embodiment of one or more of the gaming units 20. Although the following description addresses the design of the gaming units 20, it should be understood that the gaming units 30 may have the same design as the gaming units 20 described below. It should be understood that
25 the design of one or more of the gaming units 20 may be different than the design of other gaming units 20, and that the design of one or more of the gaming units 30 may be different than the design of other gaming units 30. Each gaming unit 20 may be any type of casino gaming unit and may have various different structures and methods of operation. For exemplary purposes, various designs of the gaming
30 units 20 are described below, but it should be understood that numerous other designs may be utilized.

Referring to Fig. 2, the casino gaming unit 20 may include a housing or cabinet 50 and one or more input/output devices, which may include a coin slot or acceptor 52, a paper currency acceptor 54, a ticket reader/printer 56, a lottery ticket dispenser 57, and a card reader 58, which may be used to input value to the gaming unit 20. In practice, the ticket reader/printer 56 may be embodied in a ticket printer and/or bill validator, which is used in a currently available EZ Pay casino system. A value input device may include any device that can accept value from a customer. As used herein, the term "value" may encompass gaming tokens, coins, paper currency, ticket vouchers, credit or debit cards, and any other object representative of value.

If provided, the ticket reader/printer 56 may be used as a bill validator and/or may be used to read, print or otherwise encode lottery tickets that may be purchased by the user. For example, as described below in detail, upon winning a jackpot or a hand of cards, the gaming unit 20, via the display unit 70, may ask the user if he or she desires to purchase lottery tickets. Upon a user indication that he or she desires to purchase lottery tickets, the ticket reader/printer 56 may print a lottery ticket having random or user-specified lottery numbers thereon. The fee associated with the purchased lottery tickets may be deducted from credits that the user has within the gaming unit 20. As will be readily appreciated, the lottery tickets may be lottery tickets for state or multistate lotteries. Additionally, the lottery tickets may be for intracasino or intercasino lotteries, wherein a casino holds a lottery drawing on a regular basis (e.g., daily or hourly). The ticket and printer functionality may be combined into a single ticket reader/printer 56 or, alternatively, may be embodied in a separate physical device, one of which performs ticket reading and one of which performs ticket printing.

In another example, the gaming unit 20 and/or the ticket reader/printer 56 may be adapted to redeem and/or validate lottery tickets. The player, having already obtained a lottery ticket, may be able to check whether the lottery ticket is a winner and/or how much value the lottery ticket has won. Similarly, the player may redeem the value of the ticket at the gaming unit 20. The player, for example, may insert the lottery ticket into the ticket reader/printer 56 to determine whether the ticket is a winner. If the lottery ticket is a winner, the player may be given a

choice of redeeming the value of the lottery ticket. If the player chooses not to redeem the value of the lottery ticket, the ticket reader/printer 56 may return the lottery ticket to the player. If, however, the player chooses to redeem the value of the lottery ticket, the player may be prompted, by the gaming unit 20, via the display 70 or otherwise, to press a button such as the "cash out" button. Upon pressing the button, the value of the lottery ticket may be added to the player's credit, or value, in the gaming unit 20, or the player may choose not to play the gaming unit 20 and, rather redeem the credits for another value such as cash or voucher. In yet another example, the gaming unit 20 may include a separate lottery ticket dispenser 57 for dispensing lottery tickets. The lottery ticket dispenser 57, may be able to perform all the functions the ticket reader/printer 56 is able to perform.

Alternatively or additionally, the ticket reader/printer 56 may be used to read and/or print or otherwise encode ticket vouchers 60. The ticket vouchers 60 may be composed of paper or another printable or encodable material and may have one or more of the following informational items printed or encoded thereon: the casino name, the type of ticket voucher, a validation number, a bar code with control and/or security data, the date and time of issuance of the ticket voucher, redemption instructions and restrictions, a description of an award, and any other information that may be necessary or desirable. Different types of ticket vouchers 60 could be used, such as bonus ticket vouchers, cash-redemption ticket vouchers, casino chip ticket vouchers, extra game play ticket vouchers, merchandise ticket vouchers, restaurant ticket vouchers, show ticket vouchers, etc. The ticket vouchers 60 could be printed with an optically readable material such as ink, or data on the ticket vouchers 60 could be magnetically encoded. The ticket reader/printer 56 may be provided with the ability to both read and print ticket vouchers 60, or it may be provided with the ability to only read or only print or encode ticket vouchers 60. In the latter case, for example, some of the gaming units 20 may have ticket reader/printer 56 that may be used to print ticket vouchers 60, which could then be used by a player in other gaming units 20 that have ticket reader/printer 56.

If provided, the card reader 58 may include any type of card reading device, such as a magnetic card reader or an optical card reader, and may be used to read

data from a card offered by a player, such as a credit card or a player tracking card. If provided for player tracking purposes, the card reader 58 may be used to read data from, and/or write data to, player tracking cards that are capable of storing data representing the identity of a player, the identity of a casino, the player's gaming habits, etc. Like the card reader 58, other gaming devices associated with the gaming unit 20, including, but not limited to, the ticket reader/printer 56 and the display unit 70, may be utilized for multiple purposes. The display unit 70, for example, may be of the Liquid Crystal Display (LCD) or a Cathode Ray Tube (CRT) type, wherein the display unit 70 may have touch screen capabilities allowing for the display unit to be used in multiple ways. More specifically, the touch screen capabilities of the display unit 70, may be utilized to choose the type of game to be played on the gaming unit 20, it may be used to choose a set of lottery numbers when appropriate, or the gaming unit 20 may be adapted to function as an Automatic Teller Machine Service (ATM), wherein the touch screen display unit 70 may function as a keypad for the ATM. To allow such a flexibility in the utilization of the different devices, the gaming unit 20 may include a peripheral manager.

The gaming unit 20 may include one or more audio speakers 62, a coin payout tray 64, an input control panel 66, and a color video display unit 70 for displaying images relating to the game or games provided by the gaming unit 20. The audio speakers 62 may generate audio representing sounds such as the noise of spinning slot machine reels, a dealer's voice, music, announcements or any other audio related to a casino game. The input control panel 66 may be provided with a plurality of pushbuttons or touch-sensitive areas that may be pressed by a player to select games, make wagers, select lottery numbers or information, make gaming decisions, etc.

Fig. 2A illustrates one possible embodiment of the control panel 66, which may be used where the gaming unit 20 is a slot machine having a plurality of mechanical or "virtual" reels. Referring to Fig. 2A, the control panel 66 may include a "See Pays" button 72 that, when activated, causes the display unit 70 to generate one or more display screens showing the odds or payout information for the game or games provided by the gaming unit 20. As used herein, the term "button" is intended to encompass any device that allows a player to make an input,

such as an input device that must be activated to make an input selection or a display area that a player may simply touch, such as a switch, touchscreen etc. The control panel 66 may include a "Cash Out" button 74 that may be activated when a player decides to terminate play on the gaming unit 20, in which case the gaming unit 20 may return value to the player, such as by returning a number of coins to the player via the payout tray 64.

The control panel 66 may also include a "Lottery Purchase" button 73, that may be activated when a player decides to terminate play on the gaming unit 20, in which case the gaming unit 20 may dispense the desired amount of lottery tickets as requested by the user. Alternatively, when the player decides to terminate play on the gaming unit 20, the player may depress the "Cash Out" button 74, at which time the player may be given several options, including whether to redeem all or part of the redeemable value in lottery tickets. The player may then depress the "Lottery Purchase" button 73 to redeem all or part of the redeemable value in lottery tickets.

If the gaming unit 20 provides a slots game having a plurality of reels and a plurality of paylines that define winning combinations of reel symbols, the control panel 66 may be provided with a plurality of selection buttons 76, each of which allows the player to select a different number of paylines prior to spinning the reels. For example, five buttons 76 may be provided, each of which may allow a player to select one, three, five, seven or nine paylines. Additionally, the control panel 66 may be provided with a plurality of selection buttons 78 each of which allows a player to specify a wager amount for each payline selected. For example, if the smallest wager accepted by the gaming unit 20 is a quarter (\$0.25), the gaming unit 20 may be provided with five selection buttons 78, each of which may allow a player to select one, two, three, four or five quarters to wager for each payline selected. In that case, if a player were to activate the "5" button 76 (meaning that five paylines were to be played on the next spin of the reels) and then activate the "3" button 78 (meaning that three coins per payline were to be wagered), the total wager would be \$3.75 (assuming the minimum bet was \$0.25).

The control panel 66 may include a "Max Bet" button 80 to allow a player to make the maximum wager allowable for a game. In the above example, where

up to nine paylines were provided and up to five quarters could be wagered for each payline selected, the maximum wager would be 45 quarters, or \$11.25. The control panel 66 may include a spin button 82 to allow the player to initiate spinning of the reels of a slots game after a wager has been made.

5 In Fig. 2A, a rectangle is shown around the buttons 72, 74, 76, 78, 80, 82. It should be understood that the rectangle simply designates, for ease of reference, an area in which the buttons 72, 74, 76, 78, 80, 82 may be located. Consequently, the term "control panel" should not be construed to imply that a panel or plate separate from the housing 50 of the gaming unit 20 is required, and the term
10 "control panel" may encompass a plurality or grouping of player activatable buttons.

Although one possible control panel 66 is described above, it should be understood that different buttons could be utilized in the control panel 66, and that the particular buttons used may depend on the game or games that could be played
15 on the gaming unit 20. Although the control panel 66 is shown to be separate from the display unit 70, it should be understood that the control panel 66 could be generated by the display unit 70. In that case, each of the buttons of the control panel 66 could be a colored area generated by the display unit 70, and some type of mechanism may be associated with the display unit 70 to detect when each of the
20 buttons was touched, such as a touch-sensitive screen.

Gaming Unit Electronics

Fig. 3 is a block diagram of a number of components that may be incorporated in the gaming unit 20. Referring to Fig. 3, the gaming unit 20 may include a controller 100 that may comprise a program memory 102, a
25 microcontroller or microprocessor (MP) 104, a random-access memory (RAM) 106 and an input/output (I/O) circuit 108, all of which may be interconnected via an address/data bus 110. It should be appreciated that although only one microprocessor 104 is shown, the controller 100 may include additional microprocessors. Similarly, the memory of the controller 100 may include multiple
30 RAMs 106 and multiple program memories 102. Although the I/O circuit 108 is

shown as a single block, it should be appreciated that the I/O circuit 108 may include a number of different types of I/O circuits. The RAM(s) 104 and program memories 102 may be implemented as semiconductor memories, magnetically readable memories, and/or optically readable memories, for example.

5 Fig. 3 illustrates that the player tracking unit 45, the control panel 66, the display 70, the coin acceptor 52, the bill acceptor 54, the card reader 58 and the ticket reader/printer 56 may be operatively coupled to the I/O circuit 108, each of those components being so coupled by either a unidirectional or bidirectional, single-line or multiple-line data link, which may depend on the design of the
10 component that is used. The speaker(s) 62 may be operatively coupled to a sound circuit 112, that may comprise a voice- and sound-synthesis circuit or that may comprise a driver circuit. The sound-generating circuit 112 may be coupled to the I/O circuit 108.

 As shown in Fig. 3, the components 45, 52, 54, 56, 58, 66, 70, 112 may be
15 connected to the I/O circuit 108 via a respective direct line or conductor. Different connection schemes could be used. For example, one or more of the components shown in Fig. 3 may be connected to the I/O circuit 108 via a common bus or other data link that is shared by a number of components. Furthermore, some of the components may be directly connected to the microprocessor 104 without passing
20 through the I/O circuit 108.

Overall Operation of Gaming Unit

 One manner in which one or more of the gaming units 20 (and one or more of the gaming units 30) may operate is described below in connection with a number of flowcharts that represent a number of portions or routines of one or more
25 computer programs, which may be stored in one or more of the memories of the controller 100. The computer program(s) or portions thereof may be stored remotely, outside of the gaming unit 20, and may control the operation of the gaming unit 20 from a remote location. Such remote control may be facilitated with the use of a wireless connection, or by an Internet interface that connects the gaming
30 unit 20 with a remote computer (such as one of the network computers 22, 32 as

shown in Fig. 1) having a memory in which the computer program portions are stored. The computer program portions may be written in any high level language such as C, C#, C+, C++ or the like or any low-level, assembly or machine language. By storing the computer program portions therein, various portions of
5 the memories 102, 106 are physically and/or structurally configured in accordance with computer program instructions.

Fig. 4 is a flowchart of a main operating routine 200 that may be stored in the memory of the controller 100. Referring to Fig. 4, the main routine 200 may begin operation at block 202 during which an attraction sequence may be performed
10 in an attempt to induce a potential player in a casino to play the gaming unit 20. The attraction sequence may be performed by displaying one or more video images on the display unit 70 and/or causing one or more sound segments, such as voice or music, to be generated via the speakers 62. The attraction sequence may include a scrolling list of games that may be played on the gaming unit 20 and/or video
15 images of various games being played, such as video poker, video blackjack, video slots, video keno, video bingo, etc. The attraction sequence may also include promotions or advertisement to promote the casino property and/or sequences to entice the player to play or purchase one or more lottery games.

During performance of the attraction sequence, if a potential player makes
20 any input to the gaming unit 20 as determined at block 204, the attraction sequence may be terminated and a game-selection display may be generated on the display unit 70 at block 206 to allow the player to select a game available on the gaming unit 20. The gaming unit 20 may detect an input at block 204 in various ways. For example, the gaming unit 20 could detect if the player presses any button on the
25 gaming unit 20; the gaming unit 20 could determine if the player deposited one or more coins into the gaming unit 20; the gaming unit 20 could determine if player deposited paper currency into the gaming unit; etc.

The game-selection display generated at block 206 may include, for example, a list of video games that may be played on the gaming unit 20 and/or a
30 visual message to prompt the player to deposit value into the gaming unit 20. While the game-selection display is generated, the gaming unit 20 may wait for the player

to make a game selection. Upon selection of one of the games by the player as determined at block 208, the controller 100 may cause one of a number of game routines to be performed to allow the selected game to be played. For example, the game routines could include a video poker routine 210, a video blackjack routine 220, a slots routine 230, a video keno routine 240, and a video bingo routine 250. At block 208, if no game selection is made within a given period of time, the operation may branch back to block 202.

After one of the routines 210, 220, 230, 240, 250 has been performed to allow the player to play one of the games, block 260 may be utilized to determine whether the player wishes to terminate play on the gaming unit 20 or to select another game. If the player wishes to stop playing the gaming unit 20, which may be expressed, for example, by selecting a "Cash Out" button or by selecting the "Lottery Purchase" button, control may pass to a lottery tickets routine block 261A or 261B. The lottery tickets routine block 261A and 261B, as described in detail in conjunction with Fig. 16 and Fig. 17, respectively, may prompt a user to purchase and dispense lottery tickets. As will be readily appreciated by those having ordinary skill in the art, the lottery ticket routine 261A or 261B need not be located as shown in Fig. 4, but may be located between the routines 210-250 and the block 260. Locating the lottery tickets routine 261A or 261B before the block 260 would result in the user having the option to purchase lottery tickets without the user opting to quit at the block 260.

Alternatively or additionally, the lottery tickets routine 261A or 261B could be used in one or more of the routine 210-250. For example, the lottery ticket routine 261A or 261B, when located in the poker routine 210 (Fig. 8), may be located anywhere between block 394 and 400. More specifically, the lottery ticket routine 261A or 261B, may be located between block 396 and block 398, such that the gaming unit 20 may prompt the player if he would like to purchase lottery tickets shortly after the player has won a jackpot or hand of cards. Therefore, the player may have one or more opportunities to purchase or redeem lottery tickets within the routine 200 and 210. The lottery ticket routine 261A or 261B may also be located in the blackjack routine 220 (Fig. 9), anywhere between block 438 and 444. More specifically, the lottery ticket routine 261, may be located between

block 440 and block 442, such that the player is prompted to purchase lottery tickets shortly after the player has won a hand. Therefore, the player may, once again, have one or more opportunities to purchase or redeem lottery tickets within the routine 200 and 220. Similarly, the lottery routine 261A or 261B may be located
5 between blocks 494 and 504, between blocks 578 and 584, and between blocks 640 and 646 in the slots routine 230 (Fig. 12), the keno routine 240 (Fig. 13), and the bingo routine 220 (Fig. 15), respectively. As a further alternative, the lottery ticket routine 261A or 261B could be available on an interrupt basis prompted by the depression of the Lottery Purchase button 73.

10 After the operation returns to the main routine 200 from the lottery tickets routine 261A or 261B, the controller 100 may dispense value to the player at block 262 based on the outcome of the game(s) played by the player. The operation may then return to block 202. If the player did not wish to quit as determined at block 260, the routine may return to block 208 where the game-selection display may
15 again be generated to allow the player to select another game.

It should be noted that although five gaming routines are shown in Fig. 4, a different number of routines could be included to allow play of a different number of games. The gaming unit 20 may also be programmed to allow play of different games.

20 Fig. 5 is a flowchart of an alternative main operating routine 300 that may be stored in the memory of the controller 100. The main routine 300 may be utilized for gaming units 20 that are designed to allow play of only a single game or single type of game. Referring to Fig. 5, the main routine 300 may begin operation at block 302 during which an attraction sequence may be performed in an attempt to
25 induce a potential player in a casino to play the gaming unit 20. The attraction sequence may be performed by displaying one or more video images on the display unit 70 and/or causing one or more sound segments, such as voice or music, to be generated via the speakers 62.

During performance of the attraction sequence, if a potential player makes
30 any input to the gaming unit 20 as determined at block 304, the attraction sequence may be terminated and a game display may be generated on the display unit 70 at

block 306. The game display generated at block 306 may include, for example, an image of the casino game that may be played on the gaming unit 20 and/or a visual message to prompt the player to deposit value into the gaming unit 20. At block 308, the gaming unit 20 may determine if the player requested information
5 concerning the game, in which case the requested information may be displayed at block 310. Block 312 may be used to determine if the player requested initiation of a game, in which case a game routine 320 may be performed. The game routine 320 could be any one of the game routines disclosed herein, such as one of the five game routines 210, 220, 230, 240, 250, or another game routine.

10 After the routine 320 has been performed to allow the player to play the game, block 322 may be utilized to determine whether the player wishes to terminate play on the gaming unit 20. If the player wishes to stop playing the gaming unit 20, which wish may be expressed, for example, by selecting a "Cash
15 Out" button, control may pass to a lottery tickets routine 261A or 261B, which provides the user the option of purchasing lottery tickets, before the controller 100 dispenses value to the player at block 324 based on the outcome of the game(s) played by the player. Alternatively, as described above, lottery tickets could be dispersed at any time when the Lottery Purchase button 73 is depressed. Further
20 detail regarding the lottery tickets routines 261A and 261B is provided in connection with Fig. 16 and Fig 17, respectively. Additionally or alternatively, the lottery ticket routine 261A or 261B may be located between blocks 312 and 322, such that the player may purchase or redeem lottery tickets in routine 300 before deciding to quit the game at block 322. After the completion of the block 324, operation may then return to block 302. If, however, the player did not wish to quit as determined
25 at block 322, the operation may return to block 308.

Video Poker

Fig. 6 is an exemplary display 350 that may be shown on the display unit 70 during performance of the video poker routine 210 shown schematically in Fig. 4. Referring to Fig. 6, the display 350 may include video images 352 of a plurality of
30 playing cards representing the player's hand, such as five cards. To allow the player to control the play of the video poker game, a plurality of player-selectable

buttons may be displayed. The buttons may include a "Hold" button 354 disposed directly below each of the playing card images 352, a "Cash Out" button 356, a "See Pays" button 358, a "Bet One Credit" button 360, a "Bet Max Credits" button 362, and a "Deal/Draw" button 364. The display 350 may also include an area 366 in which the number of remaining credits or value is displayed. If the display unit 70 is provided with a touch-sensitive screen, the buttons 354, 356, 358, 360, 362, 364 may form part of the video display 350. Alternatively, one or more of those buttons may be provided as part of a control panel that is provided separately from the display unit 70.

Fig. 8 is a flowchart of the video poker routine 210 shown schematically in Fig. 4. Referring to Fig. 8, at block 370, the routine may determine whether the player has requested payout information, such as by activating the "See Pays" button 358, in which case at block 372 the routine may cause one or more pay tables to be displayed on the display unit 70. At block 374, the routine may determine whether the player has made a bet, such as by pressing the "Bet One Credit" button 360, in which case at block 376 bet data corresponding to the bet made by the player may be stored in the memory of the controller 100. At block 378, the routine may determine whether the player has pressed the "Bet Max Credits" button 362, in which case at block 380 bet data corresponding to the maximum allowable bet may be stored in the memory of the controller 100.

At block 382, the routine may determine if the player desires a new hand to be dealt, which may be determined by detecting if the "Deal/Draw" button 364 was activated after a wager was made. In that case, at block 384 a video poker hand may be "dealt" by causing the display unit 70 to generate the playing card images 352. After the hand is dealt, at block 386 the routine may determine if any of the "Hold" buttons 354 have been activated by the player, in which case data regarding which of the playing card images 352 are to be "held" may be stored in the controller 100 at block 388. If the "Deal/Draw" button 364 is activated again as determined at block 390, each of the playing card images 352 that was not "held" may be caused to disappear from the video display 350 and to be replaced by a new, randomly selected, playing card image 352 at block 392.

At block 394, the routine may determine whether the poker hand represented by the playing card images 352 currently displayed is a winner. That determination may be made by comparing data representing the currently displayed poker hand with data representing all possible winning hands, which may be stored in the memory of the controller 100. If there is a winning hand, a payout value corresponding to the winning hand may be determined at block 396. After the block 396 completes execution or if the block 394 determines that the user does not have a winning hand, control passes to a block 398. In an alternate example, before block 398 receives control, control may be passed to the lottery ticket routine 261A or 261B. At the lottery ticket routine 261A or 261B the player may be prompted and given the choice to purchase or redeem lottery tickets as shown in Fig. 16 and Fig. 17, respectively. After the routine 261A or 261B is completed the control passes to block 398. At the block 398 the player's cumulative value or number of credits may be updated by subtracting the bet made by the player and adding, if the hand was a winner, the payout value determined at block 396. The cumulative value or number of credits may also be displayed in the display area 366 (Fig. 6).

After the execution of the block 398, control passes to a block 400, which determines if the user desires to quit playing the poker game. If the user desires to quit, execution of the routine 210 ends and control returns to the routine that called the routine 210 (e.g., the routine 200 of Fig. 4). Alternatively, if the user desires to continue playing the poker game, control passes from the block 400 back to the block 370.

Although the video poker routine 210 is described above in connection with a single poker hand of five cards, the routine 210 may be modified to allow other versions of poker to be played. For example, seven card poker may be played, or stud poker may be played. Alternatively, multiple poker hands may be simultaneously played. In that case, the game may begin by dealing a single poker hand, and the player may be allowed to hold certain cards. After deciding which cards to hold, the held cards may be duplicated in a plurality of different poker hands, with the remaining cards for each of those poker hands being randomly determined.

Video Blackjack

Fig. 7 is an exemplary display 400 that may be shown on the display unit 70 during performance of the video blackjack routine 220 shown schematically in Fig.

5 4. Referring to Fig. 7, the display 400 may include video images 402 of a pair of playing cards representing a dealer's hand, with one of the cards shown face up and the other card being shown face down, and video images 404 of a pair of playing cards representing a player's hand, with both the cards shown face up. The "dealer" may be the gaming unit 20.

10 To allow the player to control the play of the video blackjack game, a plurality of player-selectable buttons may be displayed. The buttons may include a "Cash Out" button 406, a "See Pays" button 408, a "Stay" button 410, a "Hit" button 412, a "Bet One Credit" button 414, and a "Bet Max Credits" button 416. The display 400 may also include an area 418 in which the number of remaining
15 credits or value is displayed. If the display unit 70 is provided with a touch-sensitive screen, the buttons 406, 408, 410, 412, 414, 416 may form part of the video display 400. Alternatively, one or more of those buttons may be provided as part of a control panel that is provided separately from the display unit 70.

Fig. 9 is a flowchart of the video blackjack routine 220 shown schematically
20 in Fig. 4. Referring to Fig. 9, the video blackjack routine 220 may begin at block 420 where it may determine whether a bet has been made by the player. That may be determined, for example, by detecting the activation of either the "Bet One Credit" button 414 or the "Bet Max Credits" button 416. At block 422, bet data corresponding to the bet made at block 420 may be stored in the memory of the
25 controller 100. At block 424, a dealer's hand and a player's hand may be "dealt" by making the playing card images 402, 404 appear on the display unit 70.

At block 426, the player may be allowed to be "hit," in which case at block 428 another card will be dealt to the player's hand by making another playing card image 404 appear in the display 400. If the player is hit, block 430 may determine

if the player has “bust,” or exceeded 21. If the player has not bust, blocks 426 and 428 may be performed again to allow the player to be hit again.

If the player decides not to hit, at block 432 the routine may determine whether the dealer should be hit. Whether the dealer hits may be determined in accordance with predetermined rules, such as the dealer always hit if the dealer's hand totals 15 or less. If the dealer hits, at block 434 the dealer's hand may be dealt another card by making another playing card image 402 appear in the display 400. At block 436 the routine may determine whether the dealer has bust. If the dealer has not bust, blocks 432, 434 may be performed again to allow the dealer to be hit again.

If the dealer does not hit, at block 436 the outcome of the blackjack game and a corresponding payout may be determined based on, for example, whether the player or the dealer has the higher hand that does not exceed 21. If the player has a winning hand, a payout value corresponding to the winning hand may be determined at block 440. After the payout value is determined at the block 440, control passes to the routine 220 or if the block 438 determines that the player is not a winner, a block 442 updates the player's cumulative value or number of credits by subtracting the bet made by the player and adding, if the player won, the payout value determined at block 440. The cumulative value or number of credits may also be displayed in the display area 418 (Fig. 7). In one example, before block 442 receives control, control may be passed to the lottery ticket routine 261A or 261B. At the lottery ticket routine 261A or 261B the player may be prompted and given the choice to purchase or redeem lottery tickets as shown in Fig. 16 and Fig. 17, respectively. After the routine 261A or 261B is completed the control passes to block 442.

After the execution of the block 442, control passes to a block 444, which determines if the user would like to quit playing the blackjack game. If the user desires to quit, control passes back to the routine (e.g., the routine 200 of Fig. 4) that called the routine 220. Alternatively, if the block 444 determines that the user does not desire to quit the blackjack game, control passes from the block 444 back to the block 420, which restarts the game.

Slots

Fig. 10 is an exemplary display 450 that may be shown on the display unit 70 during performance of the slots routine 230 shown schematically in Fig. 4. Referring to Fig. 10, the display 450 may include video images 452 of a plurality of slot machine reels, each of the reels having a plurality of reel symbols 454 associated therewith. Although the display 450 shows five reel images 452, each of which may have three reel symbols 454 that are visible at a time, other reel configurations could be utilized.

To allow the player to control the play of the slots game, a plurality of player-selectable buttons may be displayed. The buttons may include a "Cash Out" button 456, a "See Pays" button 458, a plurality of payline-selection buttons 460 each of which allows the player to select a different number of paylines prior to "spinning" the reels, a plurality of bet-selection buttons 462 each of which allows a player to specify a wager amount for each payline selected, a "Spin" button 464, and a "Max Bet" button 466 to allow a player to make the maximum wager allowable.

Fig. 12 is a flowchart of the slots routine 230 shown schematically in Fig. 10. Referring to Fig. 12, at block 470, the routine may determine whether the player has requested payout information, such as by activating the "See Pays" button 458, in which case at block 472 the routine may cause one or more pay tables to be displayed on the display unit 70. At block 474, the routine may determine whether the player has pressed one of the payline-selection buttons 460, in which case at block 476 data corresponding to the number of paylines selected by the player may be stored in the memory of the controller 100. At block 478, the routine may determine whether the player has pressed one of the bet-selection buttons 462, in which case at block 480 data corresponding to the amount bet per payline may be stored in the memory of the controller 100. At block 482, the routine may determine whether the player has pressed the "Max Bet" button 466, in which case at block 484 bet data (which may include both payline data and bet-per-payline data) corresponding to the maximum allowable bet may be stored in the memory of the controller 100.

If the "Spin" button 464 has been activated by the player as determined at block 486, at block 488 the routine may cause the slot machine reel images 452 to begin "spinning" so as to simulate the appearance of a plurality of spinning mechanical slot machine reels. At block 490, the routine may determine the positions at which the slot machine reel images will stop, or the particular symbol images 454 that will be displayed when the reel images 452 stop spinning. At block 492, the routine may stop the reel images 452 from spinning by displaying stationary reel images 452 and images of three symbols 454 for each stopped reel image 452. The virtual reels may be stopped from left to right, from the perspective of the player, or in any other manner or sequence.

The routine may provide for the possibility of a bonus game or round if certain conditions are met, such as the display in the stopped reel images 452 of a particular symbol 454. If there is such a bonus condition as determined at block 494, the routine may proceed to block 496 where a bonus round may be played. The bonus round may be a different game than slots, and many other types of bonus games could be provided. If the player wins the bonus round, or receives additional credits or points in the bonus round, a bonus value may be determined at block 498. A payout value corresponding to outcome of the slots game and/or the bonus round may be determined at block 500.

After the payout value is determined at the block 500, control passes to a block 502. In an alternate example, before block 502 receives control, control may be passed to the lottery ticket routine 261A or 261B. At the lottery ticket routine 261A or 261B the player may be prompted and given the choice to purchase or redeem lottery tickets as shown in Fig. 16 and Fig. 17, respectively. After the routine 261A or 261B is completed the control passes to block 502. At block 502, the player's cumulative value or number of credits may be updated by subtracting the bet made by the player and adding, if the slot game and/or bonus round was a winner, the payout value determined at block 500.

After the block 502 completes execution, control passes to a block 504, which determines whether the user desires to quit playing the slots routine 230. If the user desires to quit the slots routine 230, control passes back to the main routine

that called the slots routine. Alternatively, if the user does not desire to quit playing the slots routine 230, control passes from the block 504 back to the block 470.

Although the above routine has been described as a virtual slot machine routine in which slot machine reels are represented as images on the display unit 70,
5 actual slot machine reels that are capable of being spun may be utilized instead.

Video Keno

Fig. 11 is an exemplary display 520 that may be shown on the display unit 70 during performance of the video keno routine 240 shown schematically in Fig. 4. Referring to Fig. 11, the display 520 may include a video image 522 of a plurality
10 of numbers that were selected by the player prior to the start of a keno game and a video image 524 of a plurality of numbers randomly selected during the keno game. The randomly selected numbers may be displayed in a grid pattern.

To allow the player to control the play of the keno game, a plurality of player-selectable buttons may be displayed. The buttons may include a "Cash Out"
15 button 526, a "See Pays" button 528, a "Bet One Credit" button 530, a "Bet Max Credits" button 532, a "Select Ticket" button 534, a "Select Number" button 536, and a "Play" button 538. The display 520 may also include an area 540 in which the number of remaining credits or value is displayed. If the display unit 70 is provided with a touch-sensitive screen, the buttons may form part of the video
20 display 520. Alternatively, one or more of those buttons may be provided as part of a control panel that is provided separately from the display unit 70.

Fig. 13 is a flowchart of the video keno routine 240 shown schematically in Fig. 4. The keno routine 240 may be utilized in connection with a single gaming unit 20 where a single player is playing a keno game, or the keno routine 240 may
25 be utilized in connection with multiple gaming units 20 where multiple players are playing a single keno game. In the latter case, one or more of the acts described below may be performed either by the controller 100 in each gaming unit or by one of the network computer 22, 32 to which multiple gaming units 20 are operatively connected.

Referring to Fig. 13, at block 550, the routine may determine whether the player has requested payout information, such as by activating the "See Pays" button 528, in which case at block 552 the routine may cause one or more pay tables to be displayed on the display unit 70. At block 554, the routine may determine
5 whether the player has made a bet, such as by having pressed the "Bet One Credit" button 530 or the "Bet Max Credits" button 532, in which case at block 556 bet data corresponding to the bet made by the player may be stored in the memory of the controller 100. After the player has made a wager, at block 558 the player may select a keno ticket, and at block 560 the ticket may be displayed on the display 520.
10 At block 562, the player may select one or more game numbers, which may be within a range set by the casino. After being selected, the player's game numbers may be stored in the memory of the controller 100 at block 564 and may be included in the image 522 on the display 520 at block 566. After a certain amount of time, the keno game may be closed to additional players (where a number of
15 players are playing a single keno game using multiple gambling units 20).

If play of the keno game is to begin as determined at block 568, at block 570 a game number within a range set by the casino may be randomly selected either by the controller 100 or a central computer operatively connected to the controller, such as one of the network computers 22, 32. At block 572, the randomly selected
20 game number may be displayed on the display unit 70 and the display units 70 of other gaming units 20 (if any) which are involved in the same keno game. At block 574, the controller 100 (or the central computer noted above) may increment a count which keeps track of how many game numbers have been selected at block 570.

At block 576, the controller 100 (or one of the network computers 22, 32)
25 may determine whether a maximum number of game numbers within the range have been randomly selected. If not, another game number may be randomly selected at block 570. If the maximum number of game numbers has been selected, at block 578 the controller 100 (or a central computer) may determine whether there are a sufficient number of matches between the game numbers selected by the player and
30 the game numbers selected at block 570 to cause the player to win. The number of matches may depend on how many numbers the player selected and the particular keno rules being used.

If there are a sufficient number of matches, a payout may be determined at block 580 to compensate the player for winning the game. The payout may depend on the number of matches between the game numbers selected by the player and the game numbers randomly selected at block 570.

5 After the block 580 determines the payout value, control passes to a change value block 582. In an alternate example, before block 582 receives control, control may be passed to the lottery ticket routine 261A or 261B. At the lottery ticket routine 261A or 261B the player may be prompted and given the choice to purchase or redeem lottery tickets as shown in Fig. 16 and Fig. 17, respectively.

10 After the routine 261A or 261B is completed the control passes to block 582. At block 582, the player's cumulative value or number of credits may be updated by subtracting the bet made by the player and adding, if the keno game was won, the payout value determined at block 580. The cumulative value or number of credits may also be displayed in the display area 540 (Fig. 11).

15 After the block 582 completes execution, control passes to a block 584, which determines if the user desires to quit play of the keno routine 240. If the user desires to quit play of the keno routine 240, control returns to the main routine that called the keno routine 240. Alternatively, if the user desires to continue playing keno, control passes from the block 584 to the block 550

20 **Video Bingo**

Fig. 14 is an exemplary display 600 that may be shown on the display unit 70 during performance of the video bingo routine 250 shown schematically in Fig. 4. Referring to Fig. 14, the display 600 may include one or more video images 602 of a bingo card and images of the bingo numbers selected during the game. The bingo card images 602 may have a grid pattern.

To allow the player to control the play of the bingo game, a plurality of player-selectable buttons may be displayed. The buttons may include a “Cash Out” button 604, a “See Pays” button 606, a “Bet One Credit” button 608, a “Bet Max Credits” button 610, a “Select Card” button 612, and a “Play” button 614. The display 600 may also include an area 616 in which the number of remaining credits

or value is displayed. If the display unit 70 is provided with a touch-sensitive screen, the buttons may form part of the video display 600. Alternatively, one or more of those buttons may be provided as part of a control panel that is provided separately from the display unit 70.

5 Fig. 15 is a flowchart of the video bingo routine 250 shown schematically in Fig. 4. The bingo routine 250 may be utilized in connection with a single gaming unit 20 where a single player is playing a bingo game, or the bingo routine 250 may be utilized in connection with multiple gaming units 20 where multiple players are playing a single bingo game. In the latter case, one or more of the acts described
10 below may be performed either by the controller 100 in each gaming unit 20 or by one of the network computers 22, 32 to which multiple gaming units 20 are operatively connected.

Referring to Fig. 15, at block 620, the routine may determine whether the player has requested payout information, such as by activating the "See Pays"
15 button 606, in which case at block 622 the routine may cause one or more pay tables to be displayed on the display unit 70. At block 624, the routine may determine whether the player has made a bet, such as by having pressed the "Bet One Credit" button 608 or the "Bet Max Credits" button 610, in which case at block 626 bet data corresponding to the bet made by the player may be stored in the memory of
20 the controller 100.

After the player has made a wager, at block 628 the player may select a bingo card, which may be generated randomly. The player may select more than one bingo card, and there may be a maximum number of bingo cards that a player may select. After play is to commence as determined at block 632, at block 634 a
25 bingo number may be randomly generated by the controller 100 or a central computer such as one of the network computers 22, 32. At block 636, the bingo number may be displayed on the display unit 70 and the display units 70 of any other gaming units 20 involved in the bingo game.

At block 638, the controller 100 (or a central computer) may determine
30 whether any player has won the bingo game. If no player has won, another bingo number may be randomly selected at block 634. If any player has bingo as

determined at block 638, the routine may determine at block 640 whether the player playing that gaming unit 20 was the winner. If so, at block 642 a payout for the player may be determined. The payout may depend on the number of random numbers that were drawn before there was a winner, the total number of winners (if there was more than one player), and the amount of money that was wagered on the game. After the block 642 completes execution or if the block 640 determines that the user has not won, a block 644 updates the player's cumulative value or number of credits by subtracting the bet made by the player and adding, if the bingo game was won, the payout value determined at block 642. The cumulative value or number of credits may also be displayed in the display area 616 (Fig. 14). In an alternate example, before block 644 receives control, control may be passed to the lottery ticket routine 261A or 261B. At the lottery ticket routine 261A or 261B the player may be prompted and given the choice to purchase or redeem lottery tickets as shown in Fig. 16 and Fig. 17, respectively. After the routine 261A or 261B is completed the control passes to block 644.

Lottery Tickets

Exemplary flow diagrams for the lottery ticket routines mentioned in conjunction with Figs. 4 and 5 are shown in Fig. 16 and Fig. 17, at reference numeral 261A and 261B, respectively. The routine 261A begins operation at block 682, which prompts a user to purchase a lottery ticket. Such a prompt may be an on-screen display having text asking the user whether the user desires to purchase a lottery ticket or the prompt may be a blinking button, thereby giving the user a choice to obtain lottery tickets. In response to the prompt, the user may indicate whether he or she desires to purchase lottery tickets.

After block 682 asks if the user desires to purchase lottery tickets, control passes to block 684, which reads the indication provided by the user in response to the prompt. If lottery tickets are desired, control passes from block 684 to block 686. Block 686 prompts the user to enter the number of lottery tickets desired. After the user has entered the number of lottery tickets, control passes to block 688.

At the block 688, the gaming machine 20 deducts the value of the tickets from the users accumulated value. Essentially, block 688 charges the user for the tickets that the user purchased by deducting the cost of the tickets from the user's winnings. For example, if the user has \$100 of accumulated value within the gaming machine and the user purchases ten lottery tickets at a cost of one dollar each, \$10 would be deducted from the \$100 accumulated value, thereby leaving the user with \$90 of accumulated value.

After block 688 has completed execution and the value of the lottery tickets has been deducted from the player's accumulated value, control passes to block 690. At block 690 the gaming machine 20 dispenses the number of tickets selected by the user at the block 686. The lottery tickets may be printed using the ticket reader/printer 56 or the tickets may be preprinted and dispensed by the lottery ticket dispenser 57 of Fig. 2.

After block 690 has completed execution or the block 684 determines that the user does not desire to purchase any lottery tickets, control returns to the block following the block that called the routine 261A. For example, with respect to Figs. 4 and 5, control would return to block 262 and 324, respectively.

Another exemplary flow diagram for the lottery tickets routine mentioned in conjunction with Figs. 4 and 5 is shown in Fig. 17 at reference numeral 261B. The routine 261B begins operation at block 782, which prompts a user to purchase a lottery ticket. Such a prompt may be an on-screen display having text asking the user whether the user desires to purchase a lottery ticket or the prompt may be a blinking button, thereby giving the user a choice to obtain lottery tickets. In response to the prompt, the user may indicate whether he or she desires to purchase lottery tickets.

After block 782 asks if the user desires to purchase lottery tickets, control passes to block 784, which reads the indication provided by the user in response to the prompt. If lottery tickets are desired, control passes from block 784 to block 786. Block 786 prompts the user to enter the number of lottery tickets desired. The number of lottery tickets the user may obtain may depend on the amount of value the user has accumulated on the gaming 20, but the user may also be able to obtain

additional lottery tickets by adding value to the gaming unit 20, to cover the lottery tickets in excess of the value available on the gaming unit 20. For example, the user may desire to obtain \$50.00 worth of lottery tickets, but only \$40.00 of credit are available. The user may then place an additional \$10.00 worth of value into the gaming unit 20 to obtain in combination with the \$40.00 of credit, enough value to obtain the \$50.00 worth of lottery tickets. Once the user has entered the number of lottery tickets desired at block 786, control passed to block 788 and asks if the user would like to enter the lottery numbers for the desired lottery tickets. If the user chooses to enter the lottery numbers, control will then pass to block 790. At block 790, the user may enter the desired lottery numbers into the gaming unit 20 via many different means, including but not limited to, a touchscreen pad, a number pad, or the like. The user may, however already have preselected lottery numbers stored on a card, such as a credit card or a player tracking card, which may be read by the card reader 58 of Fig. 2. After the user has entered the number of lottery tickets and any preferred lottery numbers, control passes to block 792.

If the user chooses not enter the lottery numbers at block 788, control will then pass to block 794, where the controller 100 will either be programmed to obtain the lottery numbers from the lottery system 46 or the controller will be programmed to self generate the lottery numbers. If the controller 100 is programmed to generate the lottery numbers control is passed to block 796. At block 796 the controller 100 may generate one or more sets of random or pseudorandom lottery numbers for each of the lottery tickets. If the controller 100 is programmed to obtain the lottery numbers from the lottery system 46, control is passed to block 798. At block 798, the amounts and types of data communicated between the gaming unit 20 and the lottery system 46 may vary greatly. The different states and casinos may have certain gaming regulations or systems in place, thereby dictating the amounts and types of data that may be communicated between a given gaming unit 20 and the lottery system 46. For example, the lottery system 46 may randomly generate lottery numbers when prompted by the gaming unit 20. The gaming unit 20 may, however, store one or more sets of lottery numbers as provided by the lottery system 46, and utilize those stored numbers as needed. Likewise, there may be one or more intermediate devices or systems

through which the lottery numbers may travel and/or be stored. The lottery numbers, for example, may be communicated and stored on a network server or host system, such as the network computer 22, where the lottery numbers may be stored until needed by the gaming unit 20.

5 At the block 792, the gaming unit 20 deducts the value of the tickets from the users accumulated value. Essentially, block 792 charges the user for the tickets that the user purchased by deducting the cost of the tickets from the user's winnings. For example, if the user has \$100 of accumulated value within the gaming machine and the user purchases ten lottery tickets at a cost of one dollar
10 each, \$10 would be deducted from the \$100 accumulated value, thereby leaving the user with \$90 of accumulated value.

After block 792 has deducted the value of the tickets from the user's accumulated value, control passes to block 800. At block 800, the gaming unit 20 dispenses the number of tickets selected by the user at block 786. The dispensed
15 tickets include lottery numbers that are generated by the user, the gaming unit 20 or the lottery system 46. The lottery tickets may be printed using the ticker reader/printer 56 or the tickets may be preprinted and dispensed by the lottery ticket dispenser 58 of Fig. 2.

After block 800, the gaming unit communicates with the lottery system 46 at
20 block 802. Once the lottery numbers are generated, whether by the user, the lottery system 46, or the gaming unit 20, the gaming unit 20 may send lottery information, such as the lottery numbers played, the amount of money wagered, ticket identification, and the like, to the lottery system 46 to be recorded. The gaming unit 20 may, however, retain all the lottery information until a specified time, at
25 which the gaming unit 20 may release all the information to the lottery system 46. Likewise, there may be one or more intermediate devices or systems through which the lottery information may travel and/or be stored. The lottery information, for example, may be communicated after and/or during every lottery transaction to a network server or host system, such as the network computer 22, where the lottery
30 information may be stored until a specified time, or from where the lottery

information may be communicated to the lottery system 46, or another intermediate device.

After block 802 has completed execution or the block 784 determines that the user does not desire to purchase any lottery tickets, control returns to the block following the block that called the routine 261B. For example, with respect to Figs. 4 and 5, control would return to block 262 and 324, respectively.

Additionally or alternatively to obtaining lottery tickets from the gaming unit 20 during and/or after game play, the player may redeem the value of a winning lottery ticket through the gaming unit 20 before, during and/or after game play. The player, for example, may be in possession of a lottery ticket prior to playing the gaming unit 20. The player may or may not know whether the lottery ticket is a winner and may, therefore, have a desire to determine the winning status of the lottery ticket. As shown in Fig. 18, routine 900 enables the player to redeem the value of a lottery ticket. In this example, block 902 may prompt the player to insert the lottery ticket into the gaming unit 20. The prompt to the player may be a sign or screen indicating that the gaming unit 20 is able to redeem tickets, or the prompt may be any other audio and/or visual indication. The player, at block 904, may then insert the lottery ticket into the gaming unit 20. More specifically, the player may insert the lottery ticket into a device capable of reading the lottery ticket, such as the ticket reader/printer 56 or the lottery ticket dispenser 57.

At block 906 the gaming unit 20 may validate the ticket to determine, among other information, that the ticket is a valid ticket and/or that the ticket has not already been redeemed. The ticket may be validated by reading ticket identifying information, such as a barcode, from the lottery ticket and rectifying that information with data from the lottery system 46. If the ticket does not pass validation, the gaming unit 20, at block 908, may then eject the lottery ticket from the gaming unit 20 and the routine may end. If, however the ticket validates at block 906, the gaming unit 20 will determine at block 910 whether the lottery ticket is a winner. Alternatively, the gaming unit 20 may validate the ticket after it has been determined whether the lottery ticket is a winner. If at diamond 912 the lottery ticket is not a winner, control may be given to block 914 where the user may be

informed of the loosing status of the lottery ticket. The gaming unit 20 may prompt the user with the loosing status via the display 70 or through alternate means, such as speakers, a print out ticket, etc. Once the user has been informed of the loosing status, control may be given to block 908 to eject the lottery ticket from the gaming
5 unit 20.

If at diamond 912 the lottery ticket is a winner, control may be given to block 916 where the user may be informed of the winning status of the lottery ticket. The information may include, but is not limited to, how the lottery ticket is a winner and how much value is won. The gaming unit 20 may prompt the user with
10 the winning status via the display 70 or through alternate means, such as speakers, a print out ticket, etc. Once the user has been informed of the winning status, control may be pass to block 918 to give the user options on how to redeem the value of the lottery ticket. If at diamond 920 the user chooses to redeem the winnings in the form of credit in the gaming unit 20, control may pass to block 922 to add the value
15 of the lottery ticket winnings to the credits of the gaming unit 20. Therefore, if the user was already playing the gaming unit 20 prior to checking whether the lottery ticket is a winner, the value of the lottery ticket may be added to the user's already established credit. If, however, the user was not playing the gaming unit 20 prior to checking whether the lottery ticket is a winner, the value of the lottery ticket may be
20 the players initial credit in the gaming unit 20. Control may then pass to block 924 where the player may then proceed to play the gaming unit 20 as outlined in routines 200 and 300 of Figs. 4 and 5, respectively.

If at diamond 920 the user chooses to redeem the winnings in a form other than in credit for the gaming unit 20, control may pass to block 926 to dispense the
25 value of the lottery ticket to the user. At block 926 the user may redeem the value of the lottery ticket in many forms, including, but not limited to, cash, vouchers, or credit, such as to a card or an account via an electronic fund transfer (EFT) or the like.

WHAT IS CLAIMED IS:

1. A gaming apparatus, comprising:
 - a display unit that is capable of generating video images;
 - a value input device;
 - a controller operatively coupled to said display unit and said value input device, said controller comprising a processor and a memory operatively coupled to said processor,
 - said controller being programmed to allow a person to make a wager, said controller being programmed to cause a video image representing a game to be generated on said display unit, said video image representing one of the following games: video poker, video blackjack, video slots, video keno or video bingo, said video image comprising an image of at least five playing cards if said game comprises video poker,
 - said video image comprising an image of a plurality of simulated slot machine reels if said game comprises video slots,
 - said video image comprising an image of a plurality of playing cards if said game comprises video blackjack,
 - said video image comprising an image of a plurality of keno numbers if said game comprises video keno,
 - said video image comprising an image of a bingo grid if said game comprises video bingo, and
 - said controller being programmed to determine a value payout associated with an outcome of said game; and
 - a lottery ticket dispenser operatively linked to said controller and adapted to dispense lottery tickets bearing lottery indicia in response to a signal received from said controller.
2. A gaming apparatus as defined in claim 1, wherein said controller is programmed to receive said lottery ticket indicia from one of a user and a lottery system.
3. A gaming apparatus as defined in claim 1, wherein said controller is programmed to randomly select said lottery ticket indicia.

4. A gaming apparatus as defined in claim 1, wherein said lottery tickets are printed by one of a lottery ticket dispenser and a lottery ticket reader/printer.
5. A gaming apparatus as defined in claim 1, wherein said lottery ticket dispenser and said controller are adapted to read and validate lottery tickets.
6. A gaming system comprising a plurality of gaming apparatuses as defined in claim 1, said gaming apparatuses being interconnected to form a network of gaming apparatuses.
7. A gaming system as defined in claim 6, wherein said gaming apparatuses are interconnected via the Internet.
8. A gaming apparatus as defined in claim 1, wherein said controller is communicatively linked to a lottery system.
9. A gaming apparatus as defined in claim 1, wherein said controller is programmed to deduct from a user's winnings a cost associated with dispensed lottery tickets.
10. A gaming apparatus as defined in claim 1, wherein said controller is programmed to access a lottery system and report to the user prior winning lottery indicia.
11. A gaming apparatus as defined in claim 1, wherein said lottery ticket is associated with one of a casino-based lottery, a state-based lottery, and a multistate lottery.
12. A gaming apparatus as defined in claim 1, wherein said controller is programmed to dispense scratch-off type lottery tickets.

13. A gaming apparatus, comprising:

a display unit that is capable of generating video images;

a value input device;

a controller operatively coupled to said display unit and said value input device, said controller comprising a processor and a memory operatively coupled to said processor,

said controller being programmed to allow a person to make a wager; said controller being programmed to cause a video image to be generated on said display unit, said video image representing a game,

said controller being programmed to determine, after said video image has been displayed, a value payout associated with an outcome of said game represented by said video image; and

a lottery ticket dispenser being programmed to dispense lottery tickets bearing generated lottery indicia in response to a signal received from said controller.

14. A gaming apparatus as defined in claim 13, wherein said controller is programmed to receive said lottery ticket indicia from one of a user and a lottery system.

15. A gaming apparatus as defined in claim 13, wherein said controller is programmed to randomly select said lottery ticket indicia.

16. A gaming apparatus as defined in claim 13, wherein said lottery tickets are printed by one of a lottery ticket dispenser and a lottery ticket reader/printer.

17. A gaming system comprising a plurality of gaming apparatuses as defined in claim 13, said gaming apparatuses being interconnected to form a network of gaming apparatuses.

18. A gaming system as defined in claim 17, wherein said gaming apparatuses are interconnected via the Internet.

19. A gaming apparatus as defined in claim 13, wherein said controller is communicatively linked to a lottery system.

20. A gaming apparatus as defined in claim 13, wherein said controller is programmed to deduct from a user's winnings the cost associated with the lottery ticket.

21. A gaming apparatus as defined in claim 13, wherein said controller is programmed to access a lottery system and report to the user prior winning lottery indicia.

22. A gaming apparatus as defined in claim 13, wherein said lottery ticket is associated with one of a casino-based lottery, a state-based lottery, and a multistate lottery.

23. A gaming apparatus as defined in claim 13, wherein said controller is programmed to dispense scratch-off type lottery tickets.

24. A gaming apparatus, comprising:

a display unit that is capable of generating video images;

a value input device;

a controller operatively coupled to said display unit and said value input device, said controller comprising a processor and a memory operatively coupled to said processor,

said controller being programmed to allow a person to make a wager,

said controller being programmed to allow a person to make a payline selection,

said controller being programmed to cause a video image to be generated on said display unit, said video image comprising a plurality of simulated slot machine reels of a slots game, each of said slot machine reels having a plurality of slot machine symbols,

said controller being programmed to determine a value payout associated with an outcome of said slots game, said controller being programmed to determine said outcome of said slots game based on a configuration of said slot machine symbols; and

a lottery ticket dispenser operatively linked to said controller and adapted to dispense lottery tickets bearing generated lottery indicia in response to a signal received from said controller.

25. A gaming apparatus as defined in claim 24, wherein said controller is programmed to allow a user to select a indicia of paylines.
26. A gaming apparatus as defined in claim 24, wherein said lottery tickets are printed by one of a lottery ticket dispenser and a lottery ticket reader/printer.
27. A gaming system comprising a plurality of gaming apparatuses as defined in claim 24, said gaming apparatuses being interconnected to form a network of gaming apparatuses.
28. A gaming system as defined in claim 27, wherein said gaming apparatuses are interconnected via the Internet.
29. A gaming apparatus as defined in claim 24, wherein said controller is communicatively linked to a lottery system.
30. A gaming apparatus as defined in claim 24, wherein said controller is programmed to deduct from a user's winnings the cost associated with the lottery ticket.

31. A gaming method comprising:

causing a video image representing a game to be generated, said video image representing one of the following games: video poker, video blackjack, video slots, video keno or video bingo,

said video image comprising an image of at least five playing cards if said game comprises video poker,

said video image comprising an image of a plurality of simulated slot machine reels if said game comprises video slots,

said video image comprising an image of a plurality of playing cards if said game comprises video blackjack,

said video image comprising an image of a plurality of keno indicia if said game comprises video keno, and

said video image comprising an image of a bingo grid if said game comprises video bingo;

determining an outcome of said game represented by said video game image;

determining a value payout associated with said outcome of said game; and

dispensing a lottery ticket bearing lottery indicia.

32. A gaming method as defined in claim 31, further comprising determining if a user desires a lottery ticket to be dispensed.

33. A gaming method as defined in claim 31, further comprising requesting a user to provide a plurality of lottery indicia.

34. A gaming method as defined in claim 31, further comprising communicatively linking the lottery ticket dispenser to a lottery system.

35. A gaming apparatus, comprising:

a controller programmed to play a first game and to allow a user to wager on the outcome of said first game, wherein said controller is further programmed to receive requests to dispense lottery tickets; and

a lottery ticket dispenser operatively linked to said controller and adapted to dispense a lottery ticket bearing lottery indicia, for entry into second game, in response to a signal received from said controller.

36. A gaming system comprising a plurality of gaming apparatuses as defined in claim 35, said gaming apparatuses being interconnected to form a network of gaming apparatuses.

37. A gaming system as defined in claim 36, wherein said gaming apparatuses are interconnected via the Internet.

38. A gaming apparatus as defined in claim 35, wherein said controller is communicatively linked to a lottery system.

39. A gaming apparatus as defined in claim 35, wherein said controller is programmed to dispense scratch-off type lottery tickets.

40. A gaming apparatus as defined in claim 35, wherein said lottery ticket dispenser and said controller are adapted to read and validate lottery tickets.

41. A method of determining the win status of a lottery ticket comprising:

providing a gaming apparatus adapted to play one of the following games: video poker, video blackjack, video slots, video keno or video bingo, the gaming apparatus having a display unit that is capable of generating video images, a controller operatively coupled to said display unit, and a lottery ticket reader/printer operatively linked to said controller;

inserting a lottery ticket into the lottery ticket reader/printer;

assessing whether the lottery ticket is a winner; and

relaying whether the lottery ticket is a winner to a player.

42. The method of claim 41 further comprising validating the lottery ticket.
43. The method of claim 41 further comprising redeeming value for the lottery ticket.
44. A gaming apparatus, comprising:
- a controller programmed to play a first game and to allow a user to wager on the outcome of said first game, wherein said controller is further programmed to receive requests to dispense lottery tickets; and
 - a lottery ticket reader operatively linked to said controller and adapted to read a lottery ticket bearing lottery ticket identifiable information.
45. A gaming system comprising a plurality of gaming apparatuses as defined in claim 44, said gaming apparatuses being interconnected to form a network of gaming apparatuses.
46. A gaming apparatus as defined in claim 44, wherein said controller is communicatively linked to a lottery system.
47. A gaming apparatus as defined in claim 44, wherein said lottery ticket reader and said controller are adapted to validate lottery tickets.

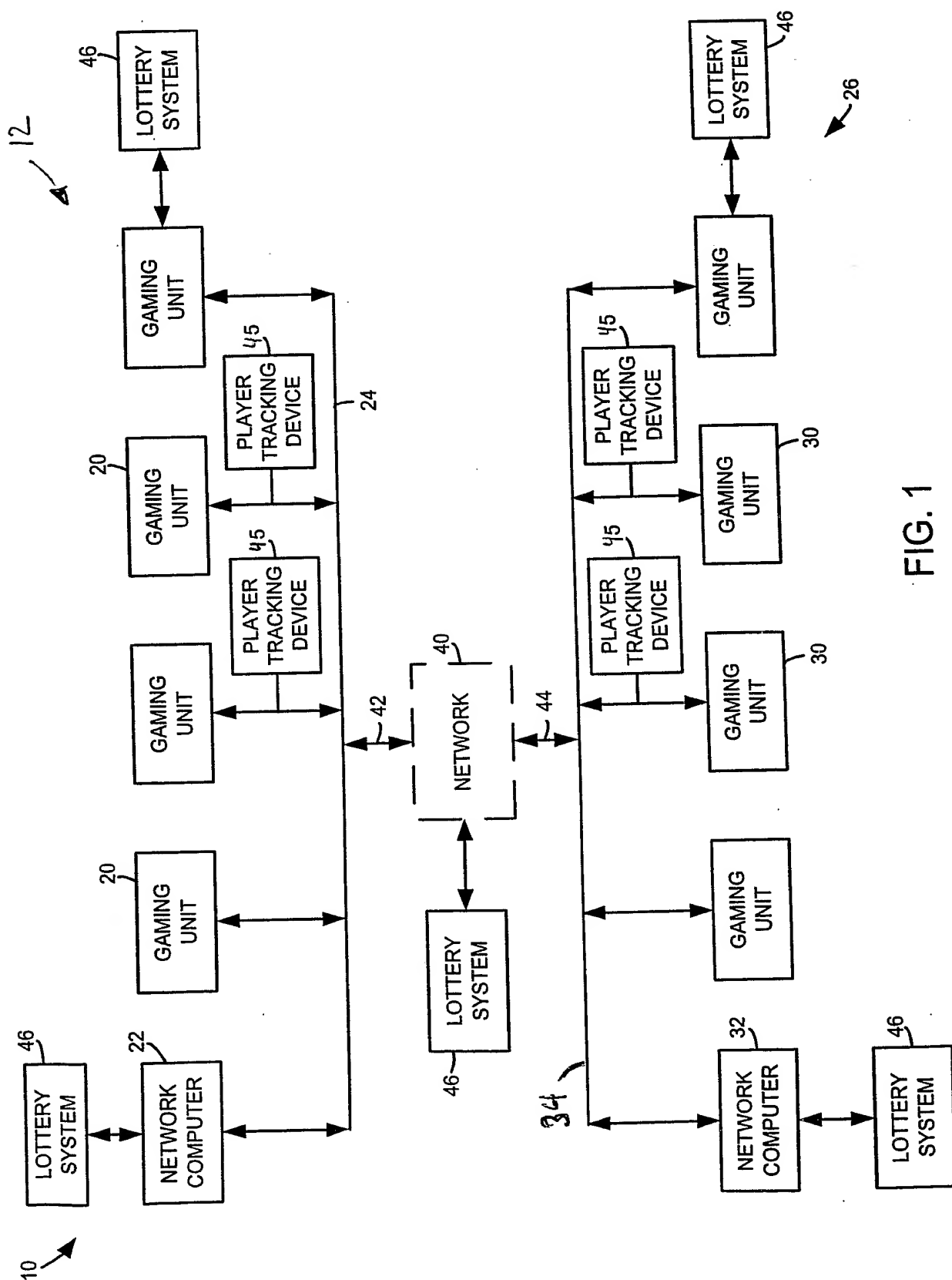


FIG. 1

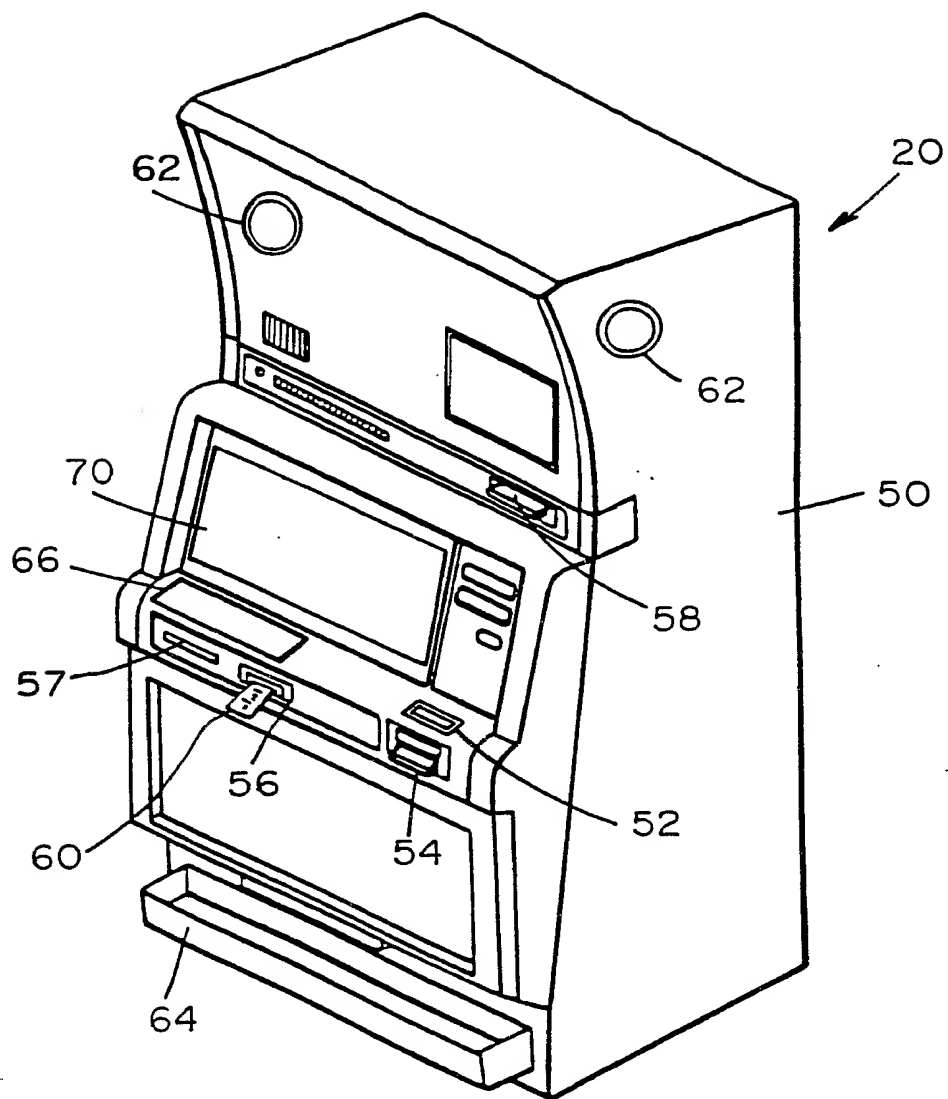


FIG. 2

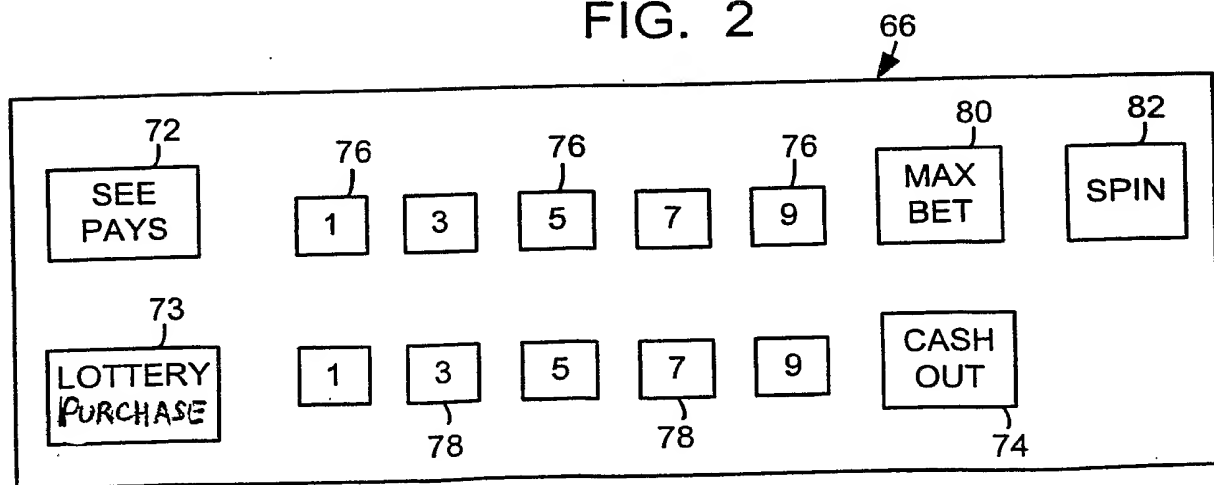


FIG. 2A

FIG. 3

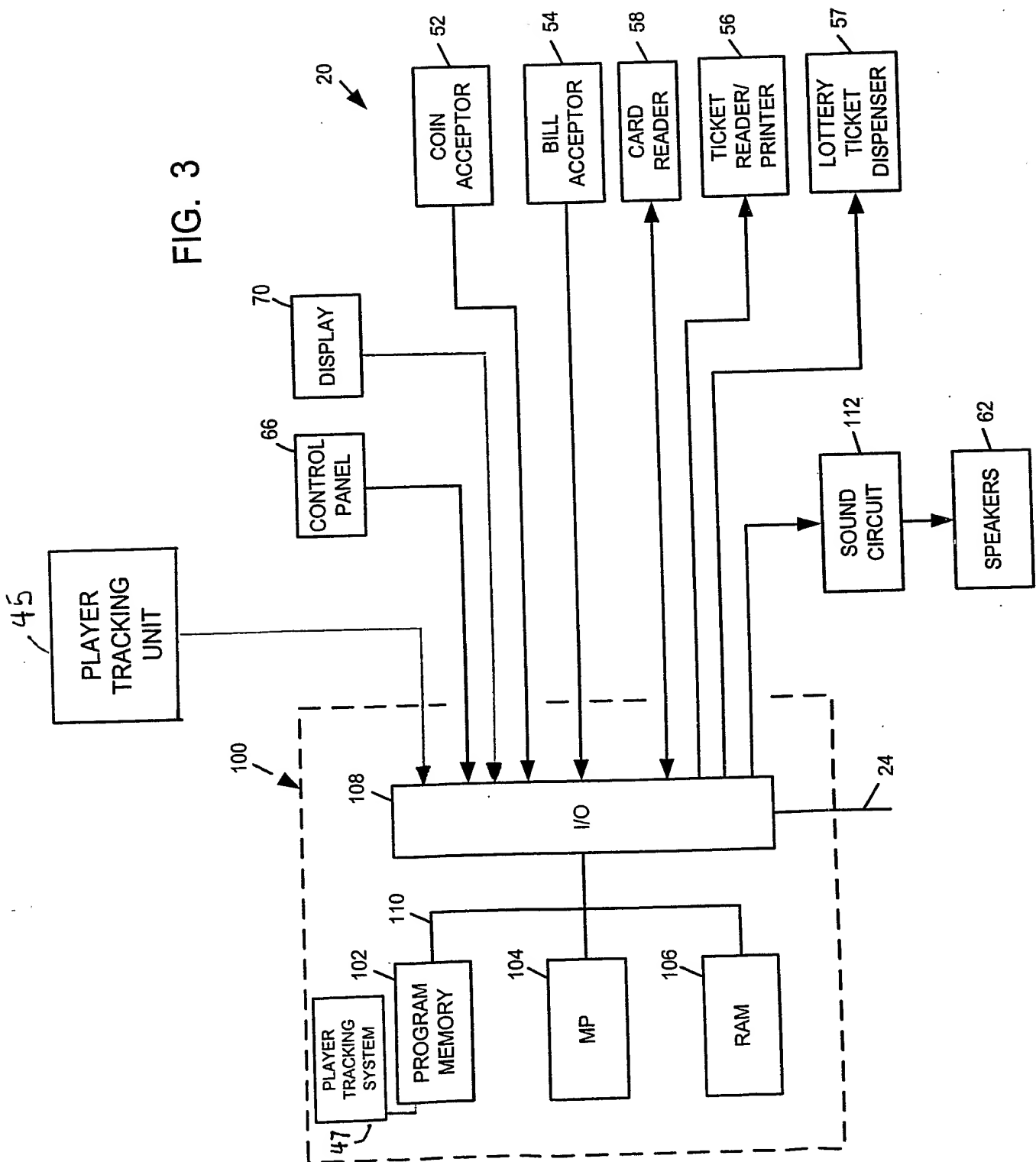


FIG. 4

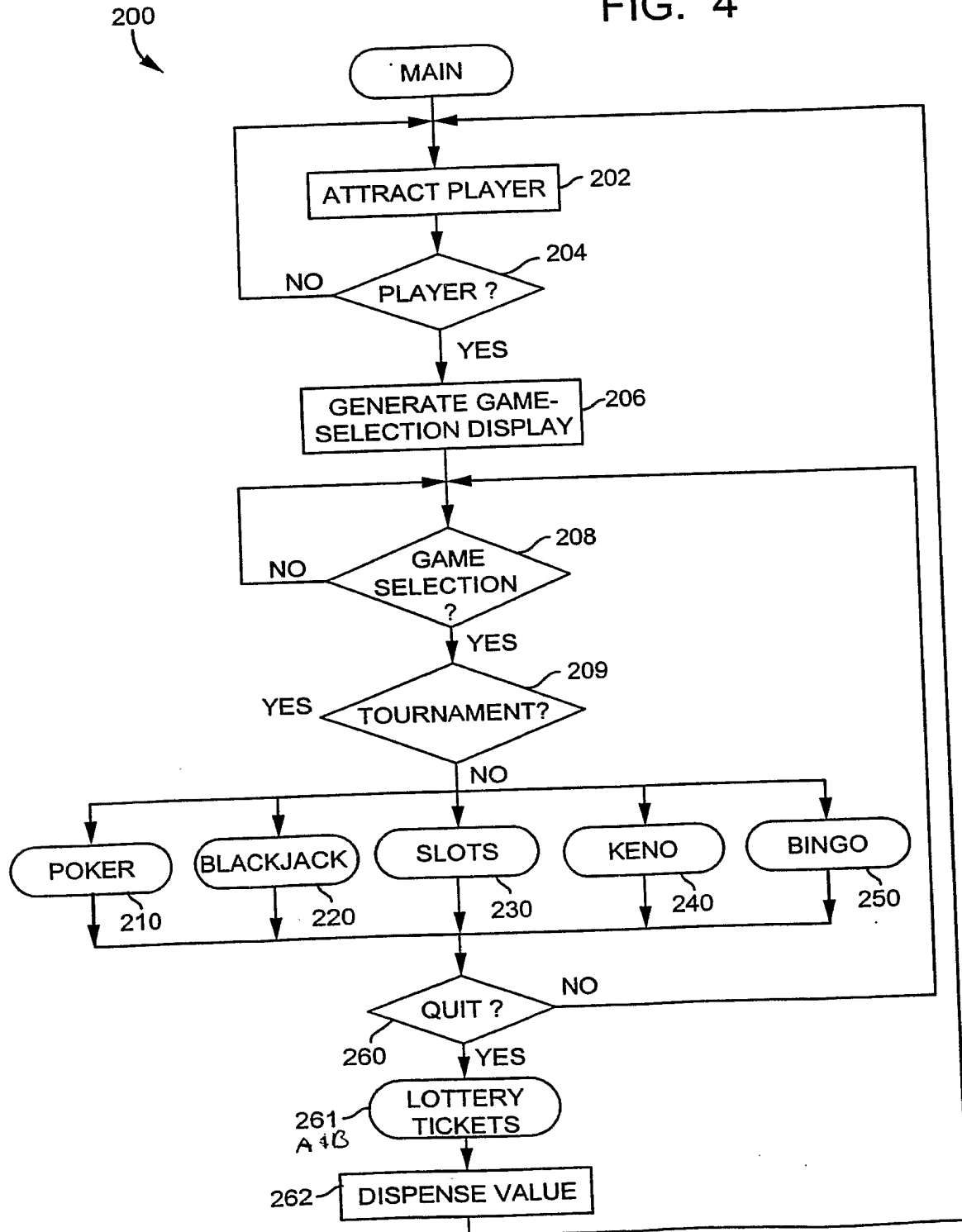
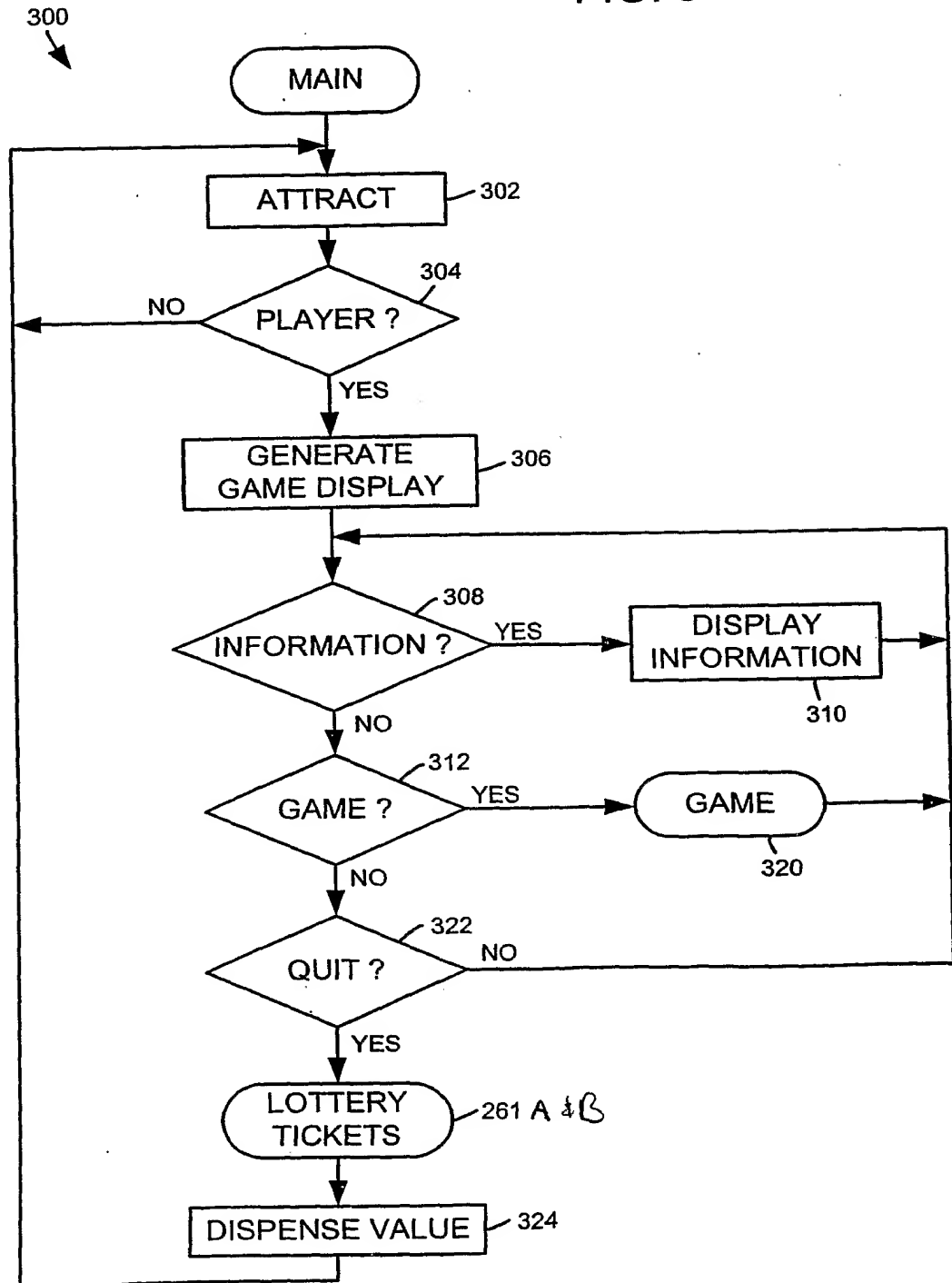


FIG. 5



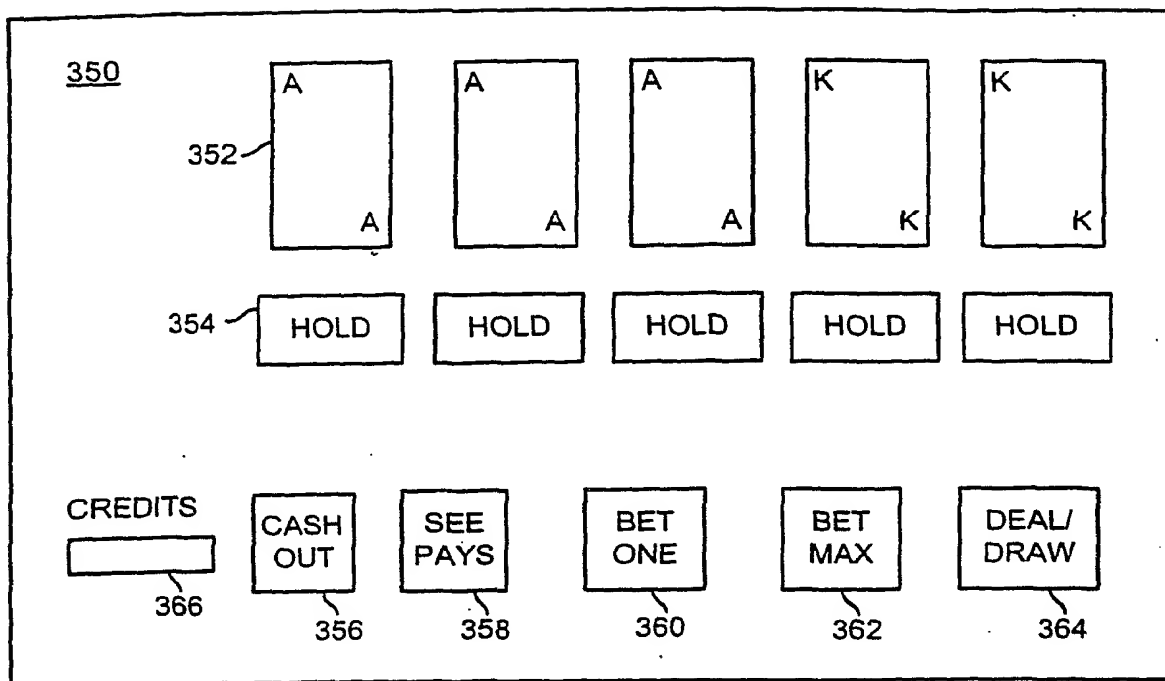


FIG. 6

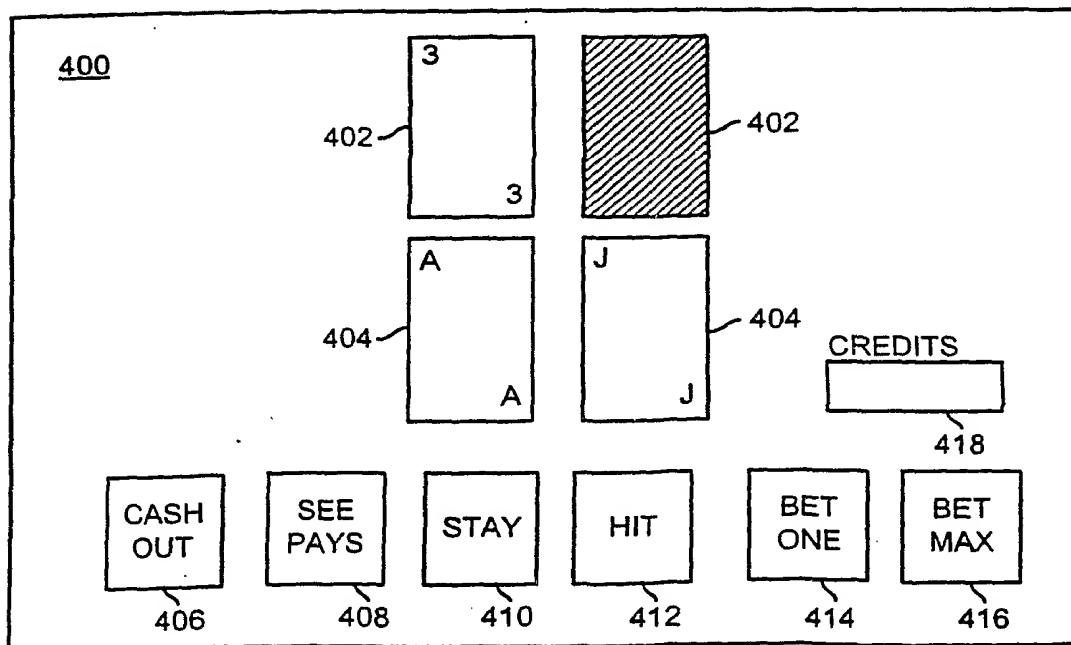


FIG. 7

FIG. 8

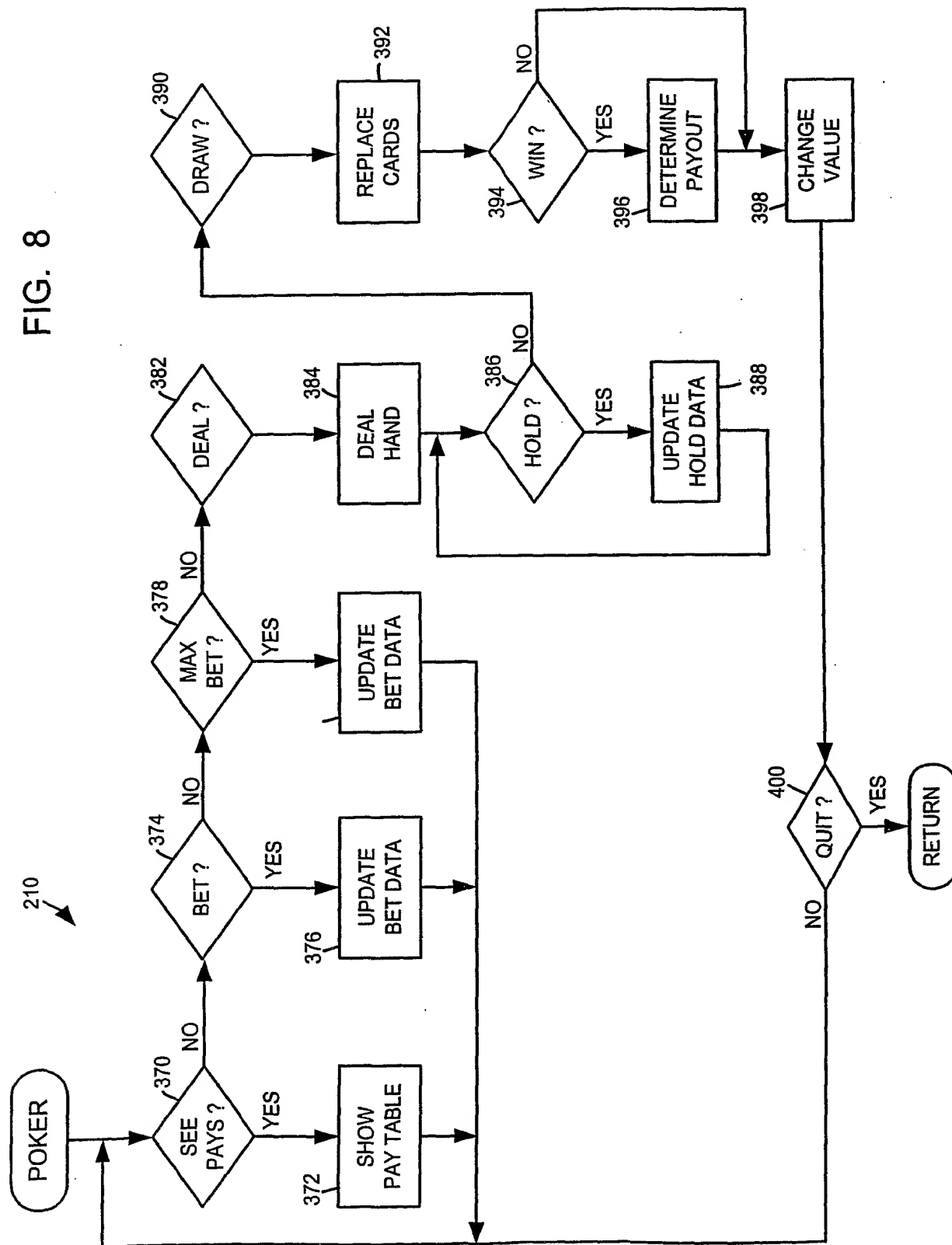


FIG. 9

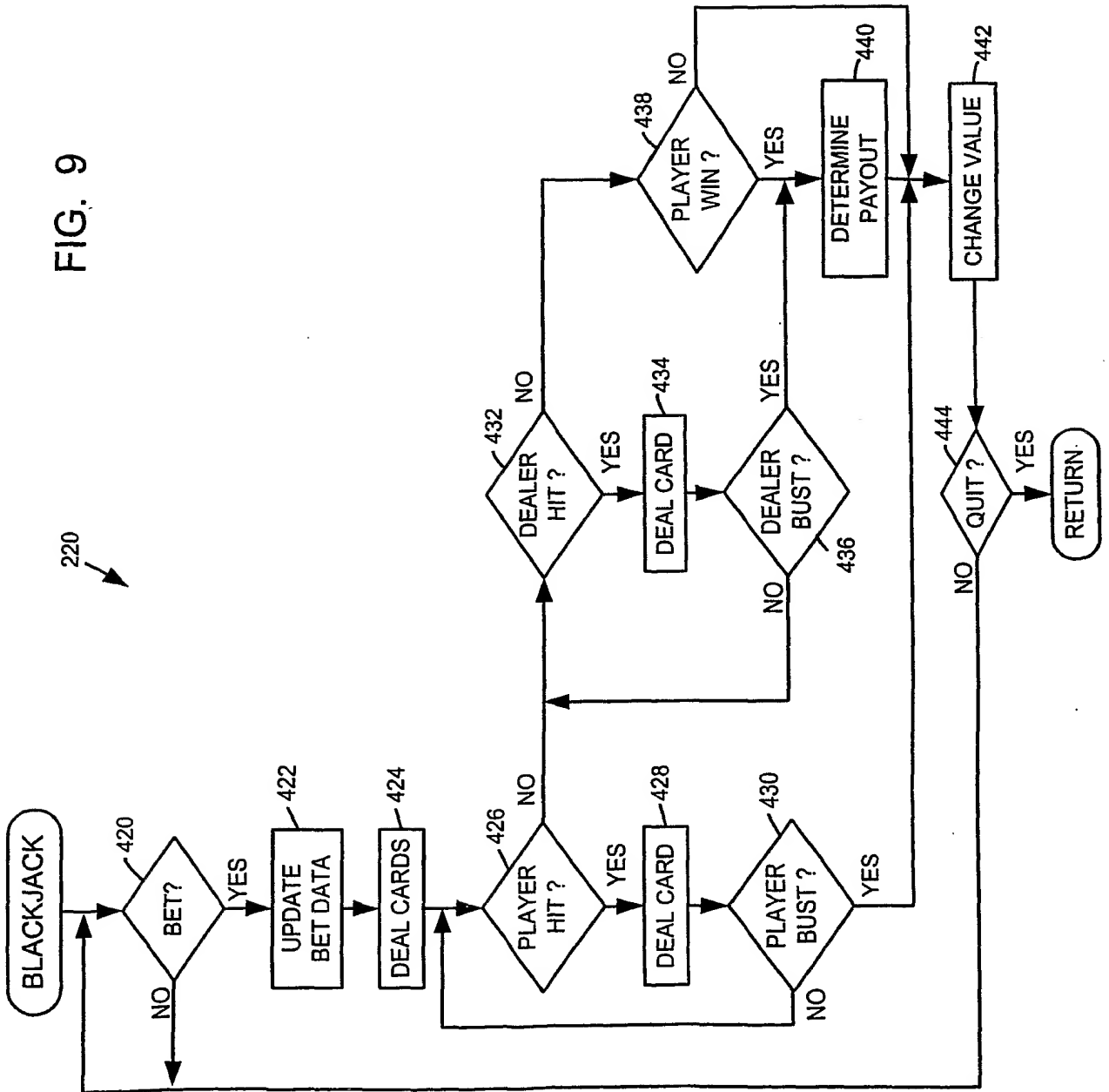


FIG. 10

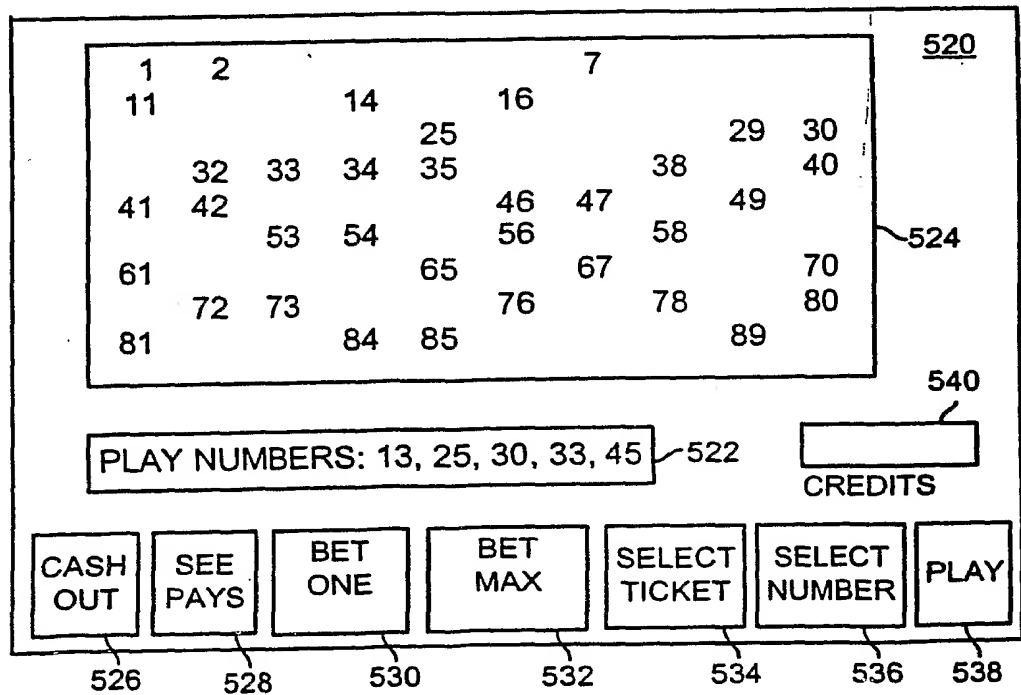
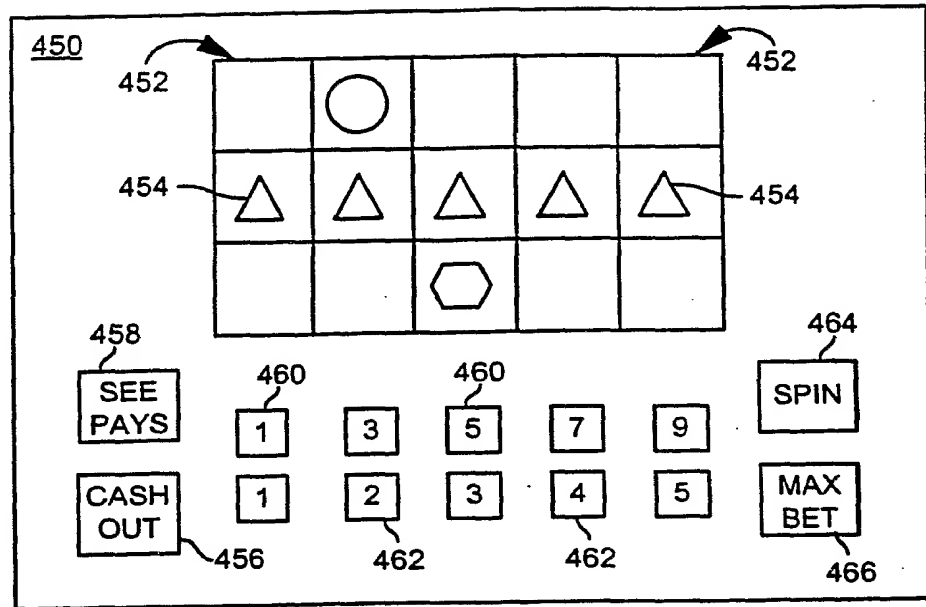


FIG. 11

FIG. 12

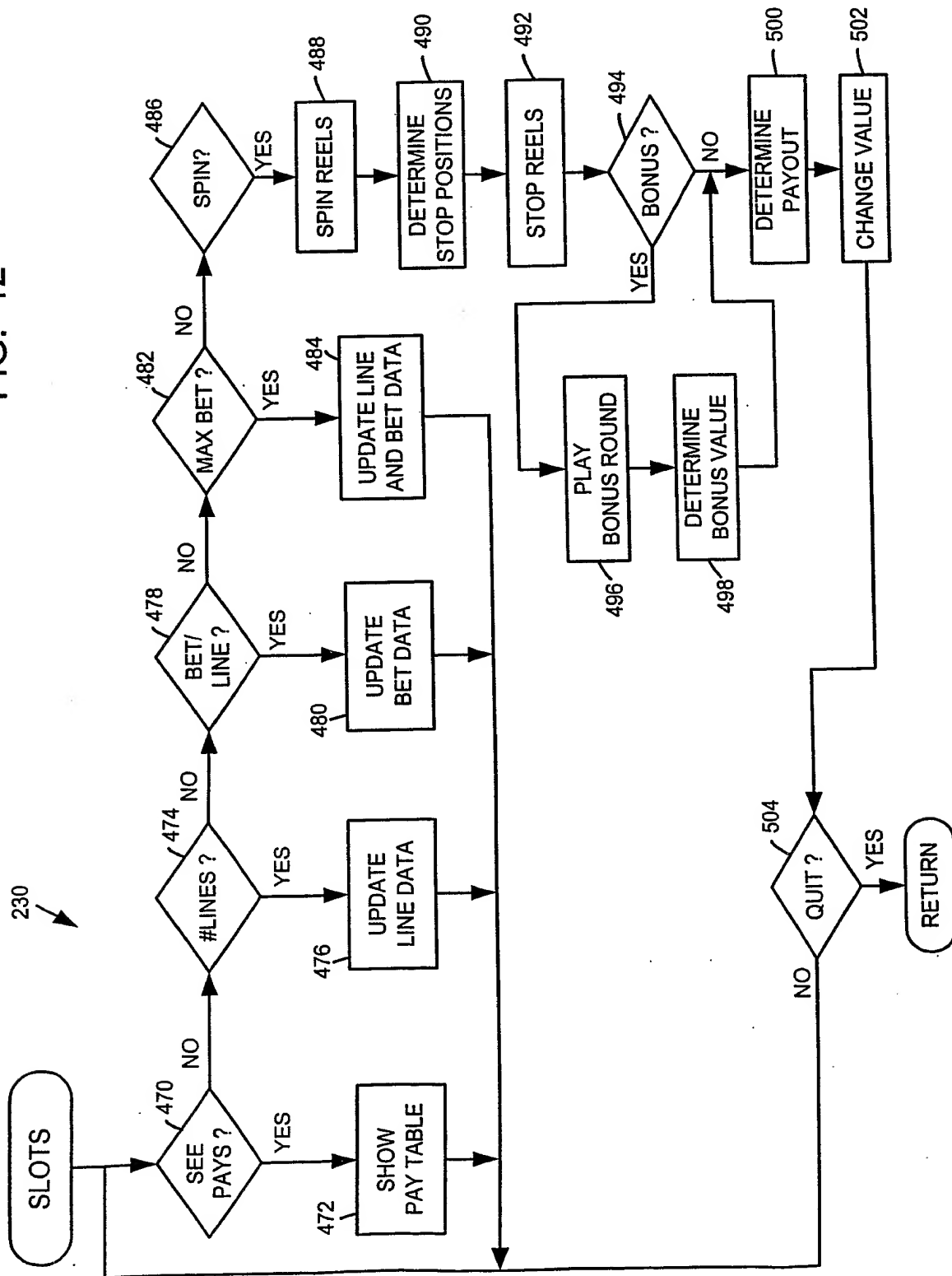
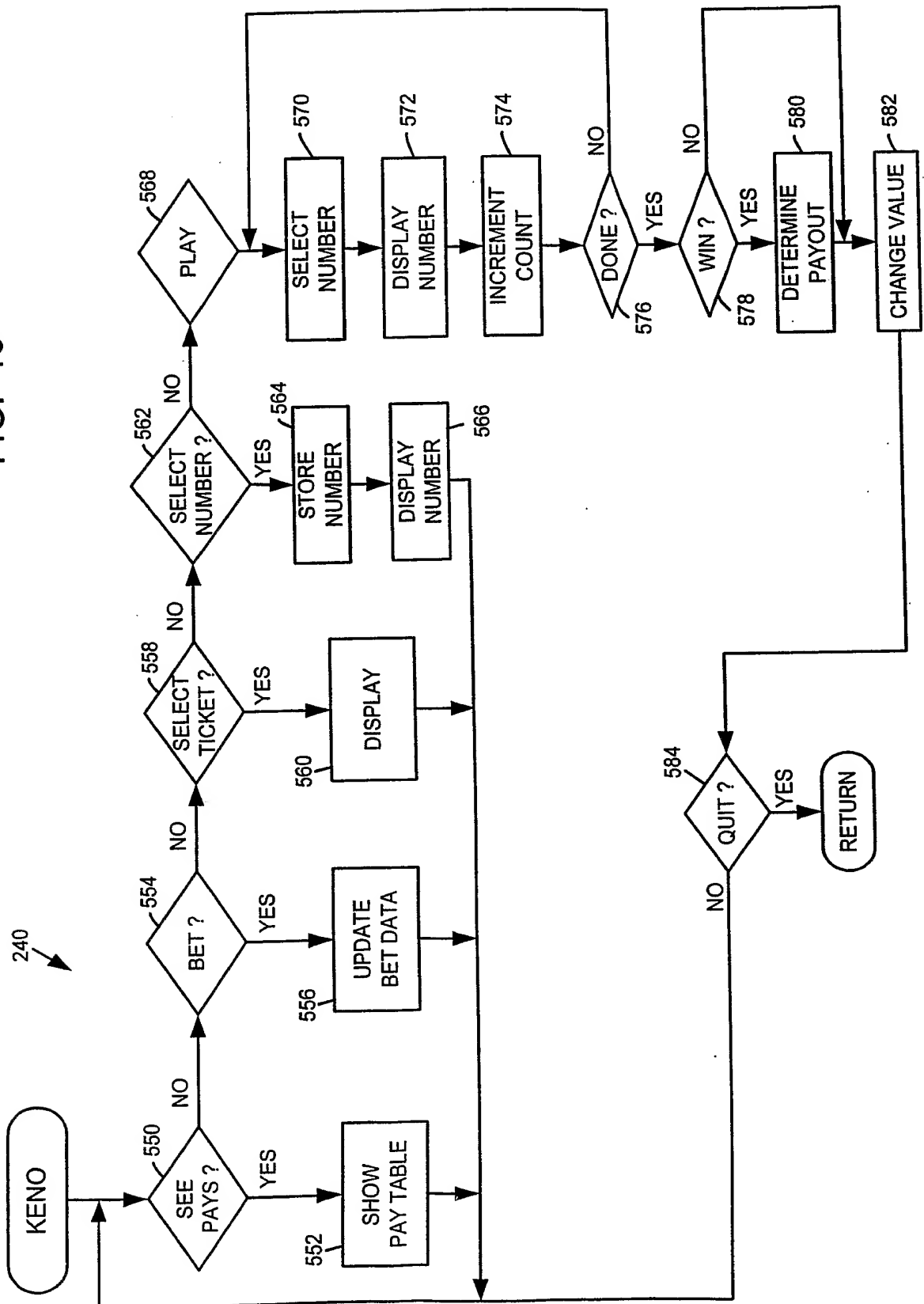


FIG. 13



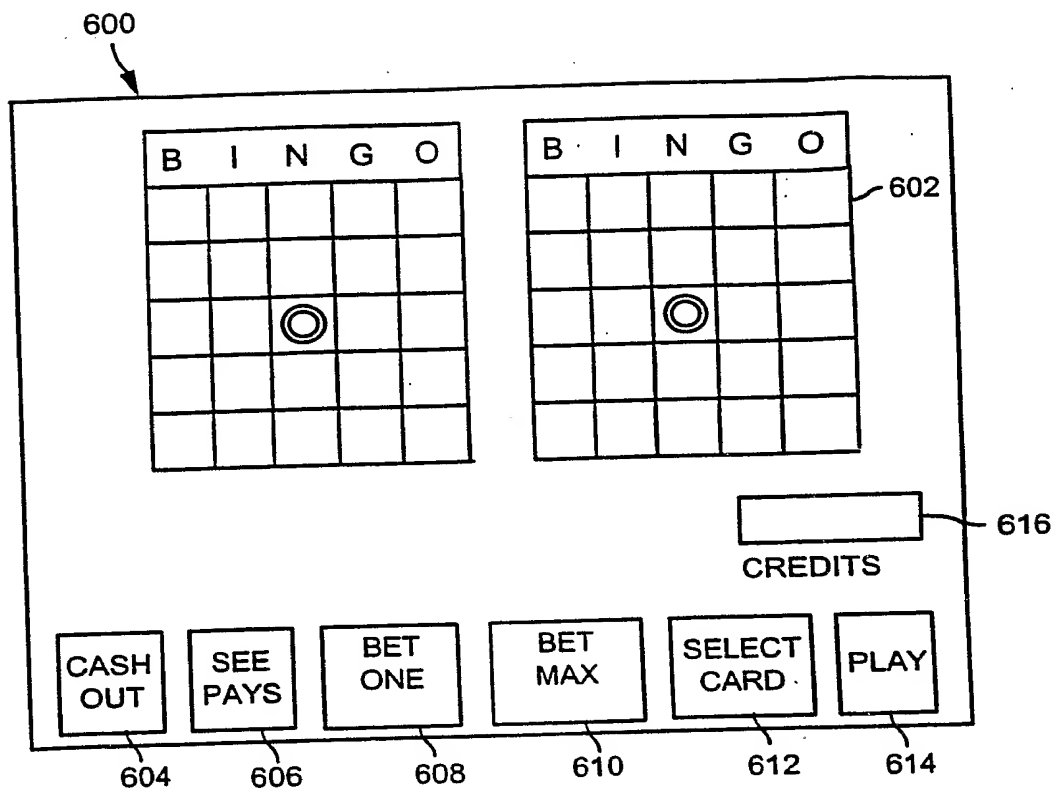
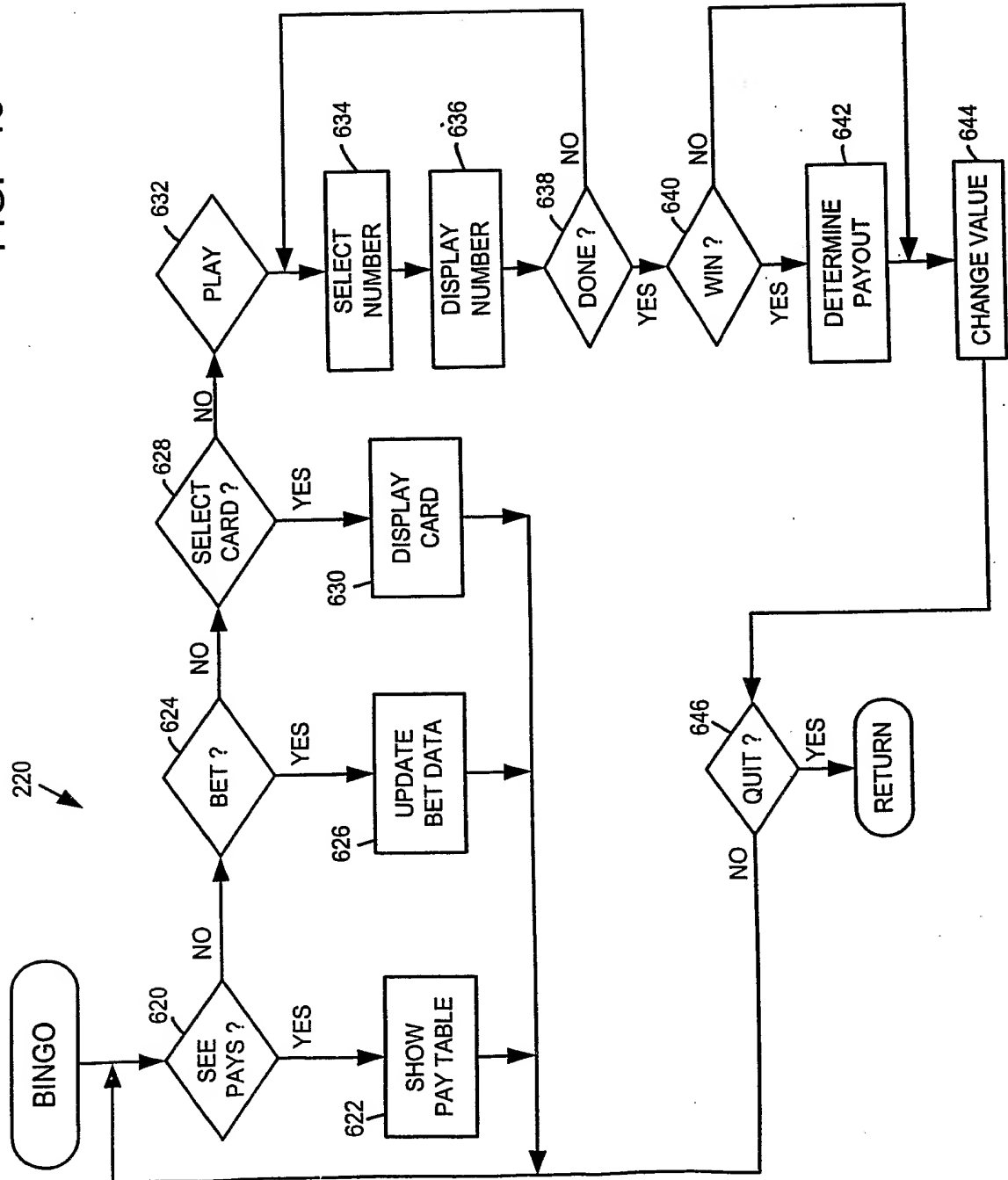


FIG. 14

FIG. 15



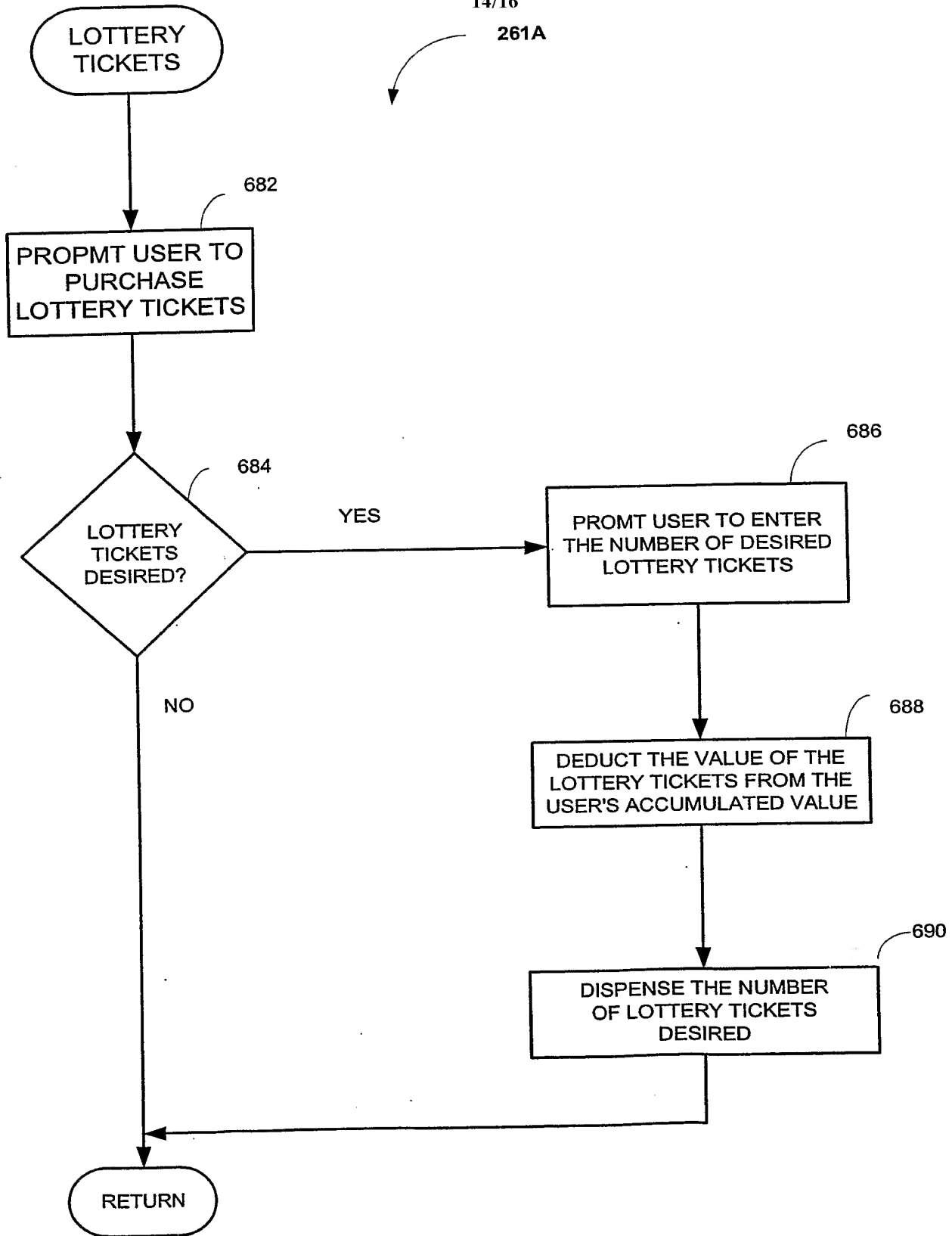


FIG. 16

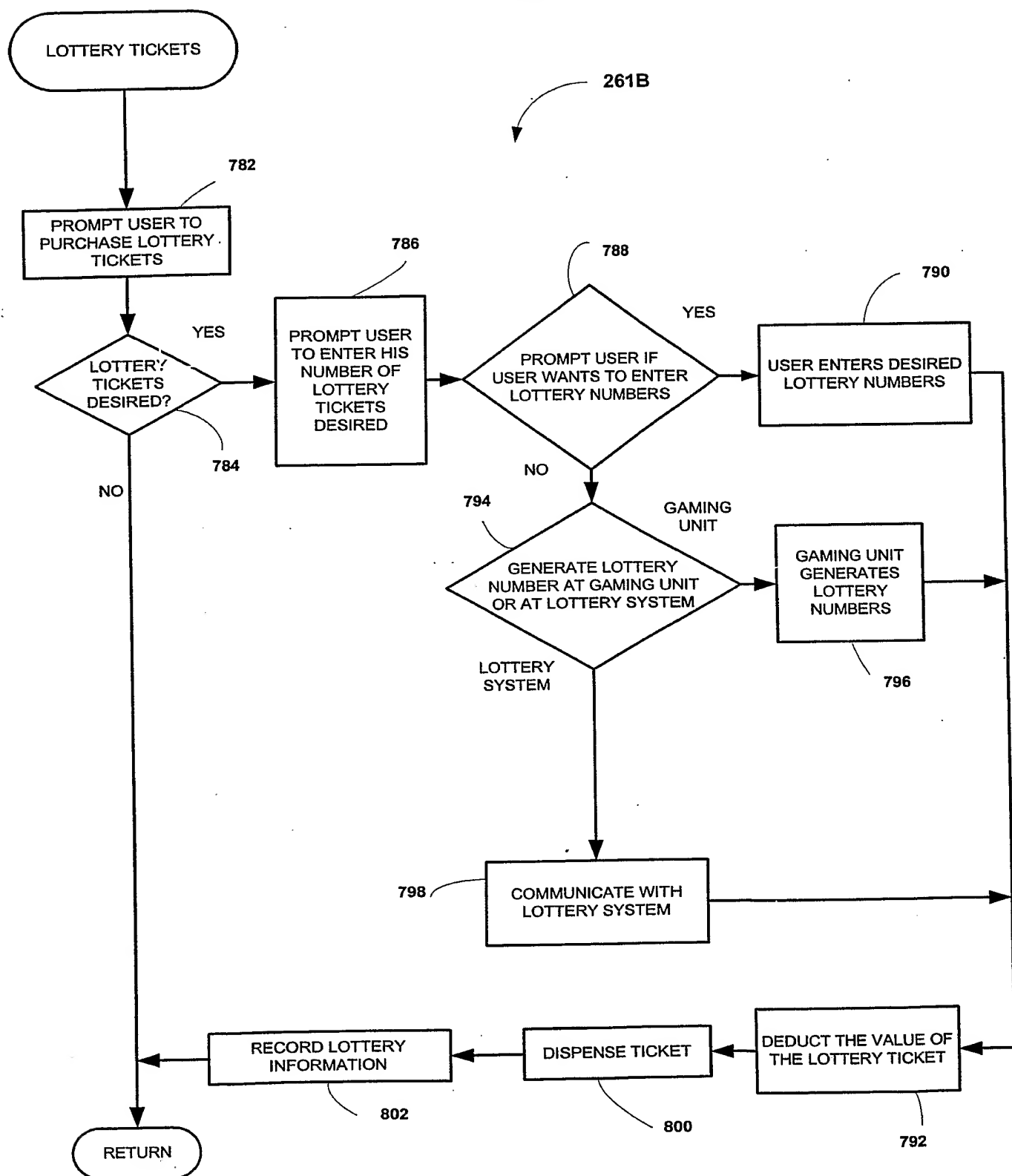


FIG. 17

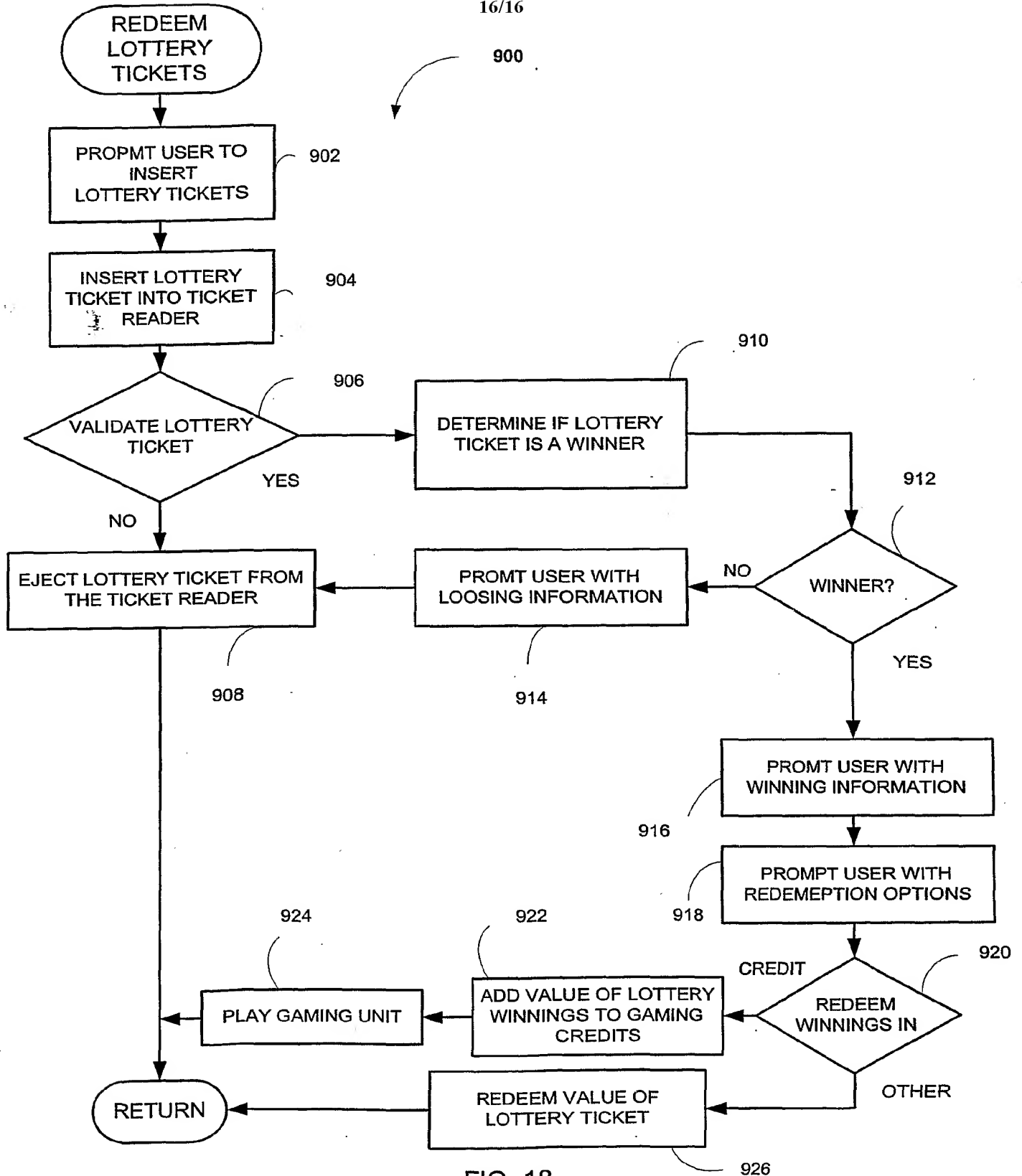


FIG. 18

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/22180

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 G07F17/32 G07C15/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G07F G07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/093136 A1 (MOODY ERNEST W) 18 July 2002 (2002-07-18) the whole document ---	1-47
X	US 2001/036854 A1 (OKUNIEWICZ DOUGLAS M) 1 November 2001 (2001-11-01) the whole document ---	1-47
X	WO 02 21468 A (ANCHOR GAMING) 14 March 2002 (2002-03-14) abstract page 7, line 18 - line 26 ---	1-47
A	US 2002/107065 A1 (ROWE RICHARD E) 8 August 2002 (2002-08-08) abstract paragraph '0024! -----	1-47

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

6 November 2003

Date of mailing of the international search report

13/11/2003

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Van Dop, E

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 03/22180

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002093136 A1	18-07-2002	NONE	
US 2001036854 A1	01-11-2001	US 2003181236 A1	25-09-2003
WO 0221468 A	14-03-2002	AU 8874801 A	22-03-2002
		CA 2421566 A1	14-03-2002
		EP 1346329 A2	24-09-2003
		WO 0221468 A2	14-03-2002
US 2002107065 A1	08-08-2002	CA 2434656 A1	06-09-2002
		NO 20033180 A	08-09-2003
		WO 02069288 A2	06-09-2002